

NATIONAL FISHERMAN

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1958



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Vol. 39
No. 1-12
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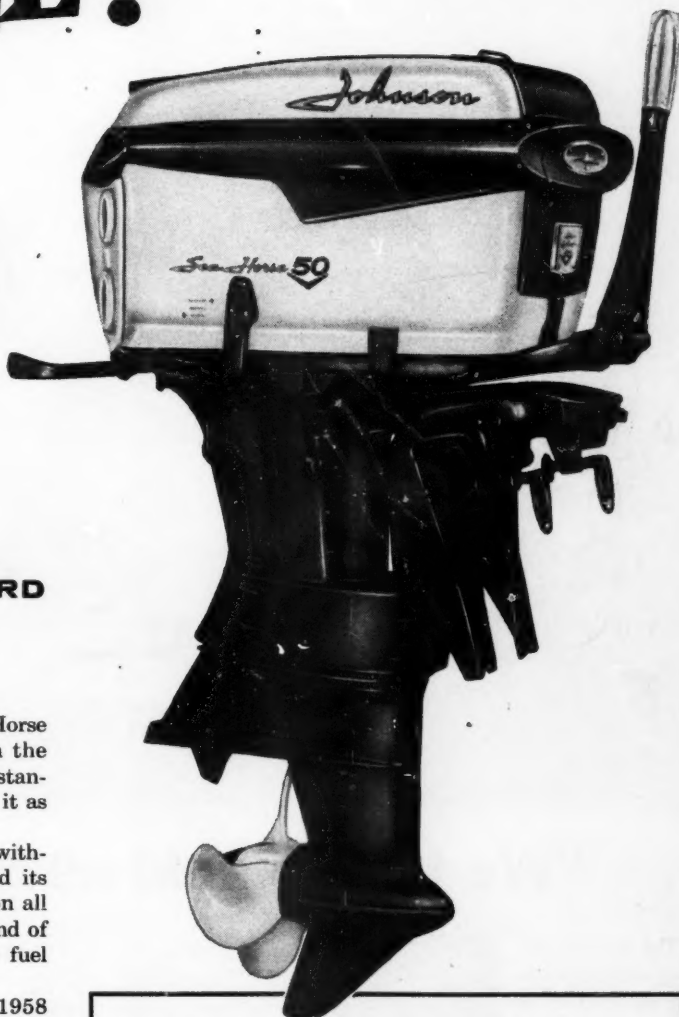
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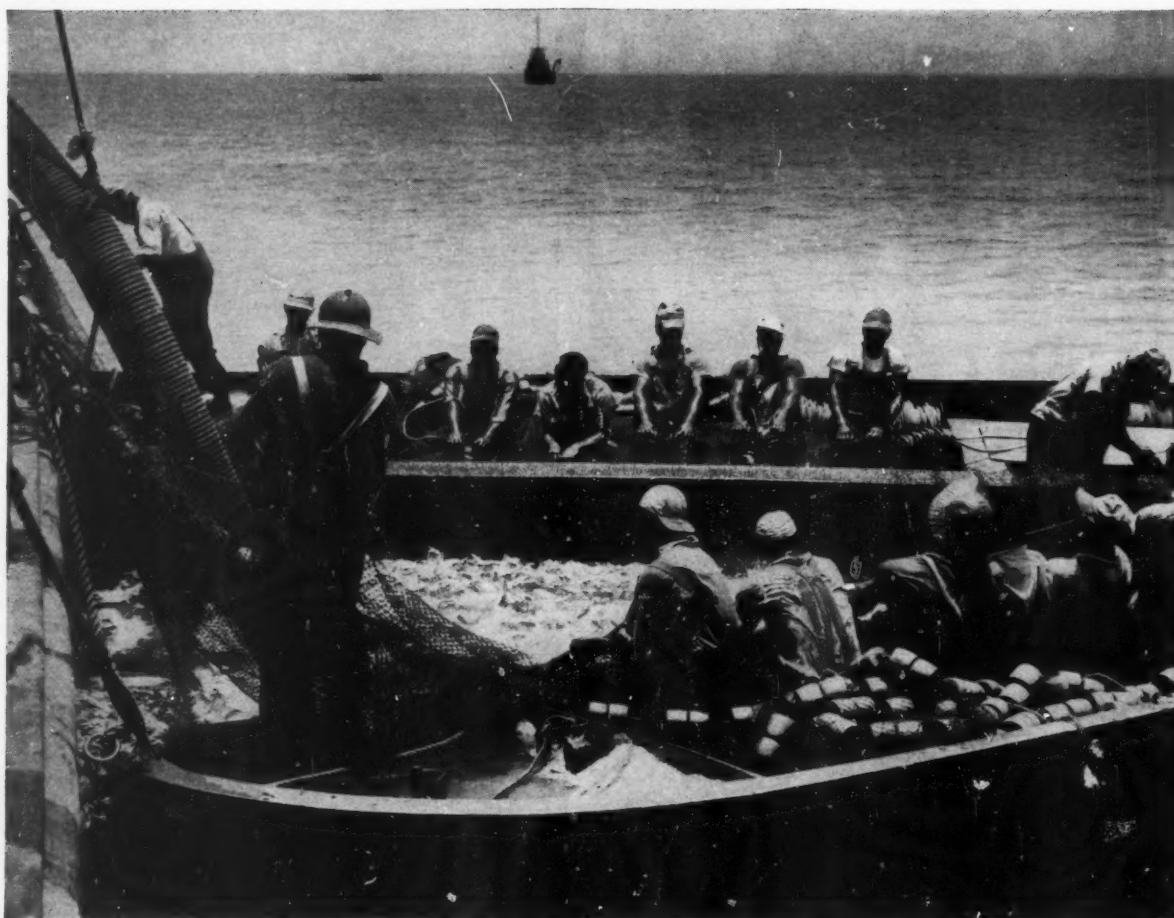
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NATIONAL FISHERMAN - FEBRUARY, 1958

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The Lookout

International Regulations

With the great amount of attention now being focused on the international aspect of the fisheries, a recent analysis by Milo E. Moore is of special interest. Mr. Moore who is Director of the State of Washington Department of Fisheries, has made an extensive study of the subject, and the following information is abstracted from his report: "The Confused State of International Fisheries".

In the struggle by the world's people for survival and economic gain, maritime nations have extended efforts to exploit sea fisheries beyond the renewal point of many of these living resources. Methods employed by nations today, have developed to such an extent, destructive practices are endangering the survival of important fisheries. In addition, expansion into areas long enjoyed and conserved by others has caused great concern among many nations.

As a result of such conditions, action is being considered to effect an impartial balance of interests. In addition, a meeting in Geneva, Switzerland or Rome, Italy in March, 1958 has been called by the International Law Commission in an attempt to define and establish boundaries and interests among nations for a common right to historic fishing areas.

Among the articles to be considered by the conference, is the ILC's proposal that a nation's sovereign right to a coastal fishery may not be extended more than twelve miles seaward of its shore.

It is doubtful that a single formula can be found that will solve all the problems. But, there are certain natural and human considerations that should be considered in an attempt to establish a common right of these interests.

The first of these considerations is the establishment of a common understanding among nations that individual rights should be secured to coastal fisheries dependent upon the perpetual care and protection of adjoining upland owners. Such rights should be acknowledged to a distance offshore which would assure the adjacent upland owners sufficient control for economic use and conservation.

The second concerns anadromous fish, such as salmon and steel head trout which migrate over wide areas of ocean pasturage. Such fish owe their origin and existence to those nationals who control and supervise their natural and artificial spawning in rivers and streams. The occupants of such a fishery should rightfully be confined to those nationals whose

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► Fishery Extension Service

Senator Frederick Payne of Maine introduced a bill in the Senate in January to authorize the Secretary of Interior to establish a fishery extension service in the Fish and Wildlife Service for the purpose of carrying out cooperative fishery extension work with the states, territories, and possessions.

The bill provides for the establishment of a fishery extension service patterned closely after the Agricultural Extension Service. The bill will supplement the Fishery Education Act.

► Want Salmon Protection

Congressman Thor Tollefson introduced a resolution in the House, January 23, requesting the Secretary of the Interior and all departments of Government to protect Alaska spawned salmon.

In the Senate on that date, Congressmen Magnuson and Jackson introduced a resolution that the Secretary of State, together with other appropriate officials of the Government, immediately initiate negotiations with the Government of Japan for the purpose of: (a) effecting the purpose of the treaty entered into by the United States, Canada, and Japan in 1951, and (b) establishing a zone in which there shall be a cessation of all fishing, in waters on the high seas where a substantial proportion of salmon of North American origin are found.

► A Future For Fish Oils

Marine oils have been traditionally used to supply man with food, medicine, and a variety of industrial products. In the United States the plentiful supply of fats and oils from other sources and the development of synthetic products has diminished the need for fish oils to be used in the traditional ways.

Fish oils are unique as they contain a high-percentage of long-chain fatty acids, with many double bonds. At present fish oils are not used for these properties, but are at a disadvantage because of them.

The peculiar structure of fish-oil fatty acids makes them potentially valuable for the manufacture of many industrial and pharmaceutical products. However, the development of such products requires much research.

The Fish and Wildlife Service has been investigating the chemistry of fish oils. From a small start at the Seattle Fishery Technological Laboratory the program has become nation wide and includes contract research at numerous universities and other laboratories.

The program includes a study of fish-oil polyamino fatty acids, which have excellent surface-active properties. These compounds have potential application as fungicides, cor-

rosion inhibitors, detergents and ore-flotation agents.

Another phase covered by the investigation is the preparation and separation of fatty alcohols made from fish oils. These are extremely valuable in organic research because of the variety of other substances that can be made from them.

► Can Expand Sponge Output

According to the Assistant Secretary of the Interior, the American natural sponge industry can be placed on a high, sustained-yield basis, if proper management and harvesting is put into effect. The statement was based on a study made by the University of Miami Marine Laboratory for the Fish and Wildlife Service.

The sponge beds off the coast of Florida could not only be revitalized, but could produce sponges at prices to compete with synthetic sponges.

The study showed that restricting harvest to sponges more than six inches in diameter, transplanting mature sponges during the spawning period, and making other changes in management and harvesting techniques, such a goal could be reached.

The report says that no desirable specie should be harvested until it has had a chance to reproduce and sustain the yield. A commercial sponge less than six inches in diameter is immature and has not had the opportunity to reproduce. Therefore it should not be taken. Between 15 and 25 percent of the sponges harvested at present are under six inch limit. For a year or so the production would be down that much in volume, but since the small sponges bring a lesser price, the decrease in value would only be 5 to 10 percent. The increase in the yield after the first couple of years would more than make up for the loss.

According to the research, the sponge areas could be practically doubled in ten years time. The wool sponge which makes up 90 percent of the commercial harvest reaches the six inch size in about three and a half years. Production which dropped to a low of 11,000 pounds in 1951 has climbed to a present total of 30,000 pounds yearly.

► Storm Signals Changed

The U. S. Weather Bureau's new simplified system of Coastal Warning Displays has been in effect since January 1. Whenever winds dangerous to navigation are forecast by the Weather Bureau, storm warning signals are displayed along the coasts of the United States, the Great Lakes, the Hawaiian Islands, and Puerto Rico.

FISHERY PROGRESS

Under the new system, only four separate flag signals will be used during the day, instead of seven. During the night four comparable lantern signals will be used for Small Craft, Gale, Whole Gale, and Hurricane warnings.

A single, nondirectional, gale warning signal has been substituted for the signals that were used to specify northeast, southeast, southwest and northwest gales.

A new lantern signal has been introduced for use during the night for small craft warnings. Under the old system small craft warnings were displayed only in the daytime.

A new and separate signal has been introduced for whole gale warnings. Under the old system the same signal was used for whole gale and hurricane.

The visual signals are displayed as supplementary to the written advisories and warnings distributed by radio, television and press.

SMALL CRAFT WARNING: One red pennant displayed by day and a red light above a white light at night to indicate winds up to 38 miles an hour (33 knots) and/or sea conditions dangerous to small craft operations.

GALE WARNING: Two red pennants displayed by day and a red light above a white light at night to indicate winds ranging from 39 to 54 miles an hour (34 to 48 knots).

WHOLE GALE WARNING: A single square red flag during the day with a black center and two red lights at night to indicate winds ranging from 55 to 73 miles an hour (48 to 63 knots).

HURRICANE WARNING: Two square red flags with black centers at day and a white light between two red lights at night indicate winds above 74 miles an hour (64 knots).

► Trade Act Extension

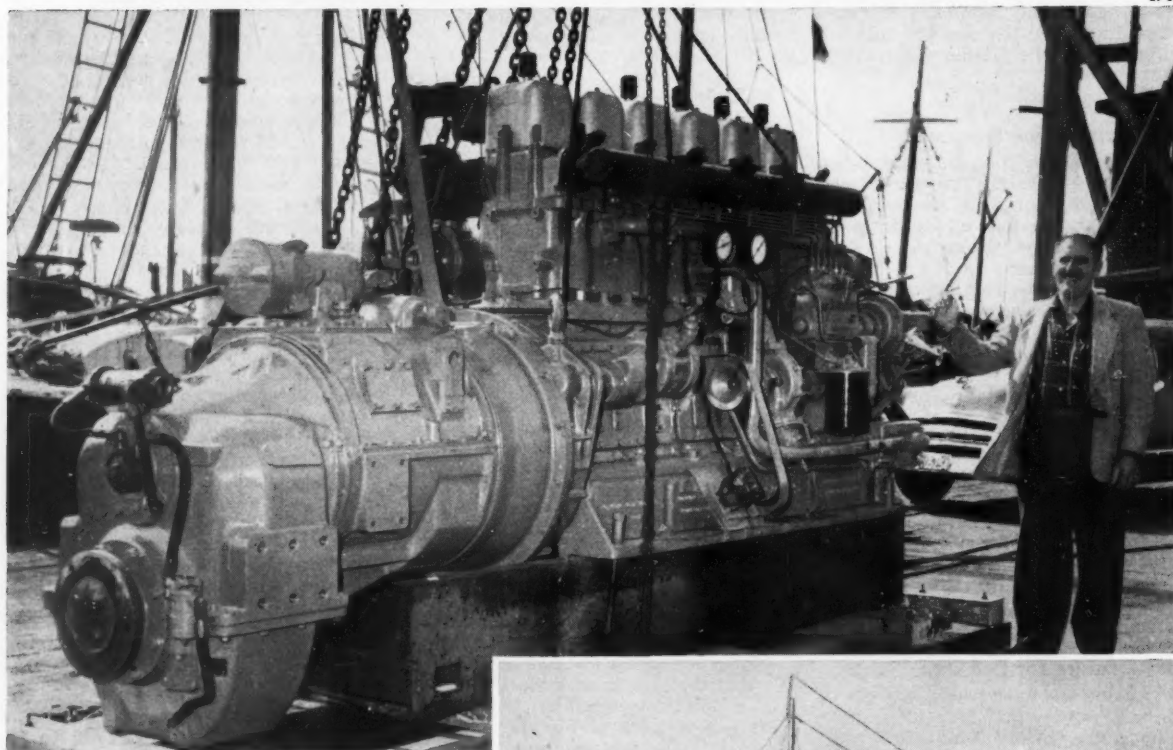
The administration has asked Congress for a five-year extension of the Reciprocal Trade Agreements Act, due to expire in June 1958, as well as presidential authority to cut tariffs by 25 percent. In 1955, the Act was extended for three years, with a 15 percent tariff cutting authority.

Some new suggestions are included in the administration's proposal which could benefit the fishing industry. One would give the President authority to raise duties after finding that imports under a reduced duty are injuring the domestic industry.

The President's present authority permits him to increase such duties to 50 percent above the rate in effect in 1945. The change would allow him to raise the rate to 50 percent above the 1934 rates when tariffs were at the highest.

Skipper-Owner Rudolph B. Matland REPOWERS the *RUSH* with Another **WAUKESHA**

370



• The 73' *Rush* of Fairhaven, Mass., is changing from scalloping to dragging. Captain Rudolph B. Matland is changing engines too—but just the model, not the make. He has had a 1905 cu. in. Waukesha Wanderer Diesel for five years. He knows Waukesha dependability. Now he's repowering with another Waukesha—installed by Hathaway Machinery Co.—a six-cylinder $8\frac{1}{2} \times 8\frac{1}{2}$ -in., 2894 cu. in. Defender Diesel that will give him up to 300 hp at 1000 rpm, all 24 hours of the day. Equipped with a Snow-Nabstedt 3:1 reduction gear and front power take-off, the Waukesha Defender Diesel will swing a new 60 x 48 5-blade Federal propeller. All Waukesha Marine Diesels are economical to run, easy to maintain, and upkeep is low.

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New directors of the Texas Shrimp Association. Left to right: Sydney Herndon, retiring president, Ed Dumas, Wright Gore, John Mehos, John Clegg, Chick Roberts, T. B. Mock, John Santos Carinhas Jr., Ralph White, and Adolph Brooks.

Educational Program For Shrimp Fishermen Outlined At Texas Association Meeting

OPTIMISM was the keynote of the eighth annual convention of the Texas Shrimp Association held January 11 at Brownsville. More than 100 boat owners, shrimp processors, and dealers were present. The treasurer's report indicated a healthy financial condition for the association.

A new plan of assessing dues and providing funds for association work, in which a majority of independent boat owners and their crews participate, was explained. The consensus was that more and more independent captains and their crews will participate in association activities.

Private and floor comments indicated that Texas shrimpers had ended one of the most successful years in the industry's history, with catches materially up from 1956 and prices in general good.

Olivier J. Clark, of Clarke Sea Food Co., Aransas Pass, succeeded Sydney H. Herndon of Corpus Christi, as president. Ed Dumas, of Daniel & Dumas Seafoods Inc., Port Lavaca and Chick O. Roberts, Aransas Pass, were named as vice presidents. The latter is an independent boat owner.

Director John Mehos, Galveston, introduced John Santos Carinhas, Jr., of Patterson Shrimp Co., who told of a project to organize a Brownsville school to train shrimp fishermen. This is a cooperative project between the Texas Vocational Education program and the Brownsville Shrimp Dealers' Association.

The course covers 200 hours of intensive instruction under practical shrimp fishermen and is aimed at training young men to become competent shrimpers. "Our aim is to prepare a student to start on a shrimp boat as an apprentice—a header—" Carinhas explained. "And give him sufficient basic training and knowledge so that he may advance to a good and responsible job aboard a shrimp trawler."

The course, entitled "Fundamentals of the Shrimping Industry," requires attendance three nights a week. The course covers virtually every phase of fishing, from simple seamanship to engines, depth recorders and radios, and conservation of the catch aboard. "We hope to contribute something to alleviate the growing problem of obtaining competent crewmen for shrimp boats."

Better Navigating Judgment Needed

Captain C. G. Bowman, Coast Guard Chief of Staff, Eighth Naval District, New Orleans, told shrimp men that there was a serious lack of navigational knowledge among shrimp boat operators. He warned of the ultimate

in operating a boat without someone aboard who is a reliable navigator. Bowman said that of 576 distress calls answered by the Coast Guard in that district last year, one third came from shrimp boats and that 90 percent of those were the result of navigational incompetence.

He took the opportunity to warn boat captains against entering Mexico's territorial waters. "Our planes have seen numerous boats considerably nearer than nine miles of the Mexican coast," he declared, "and that is inviting trouble." He urged boat owners to renew their insistence that crews keep boats outside the nine-mile limit.

Bowman said that illegal conversations over short wave radios aboard shrimp vessels were hampering rescue work and urged that all boat captains refrain from unnecessary talking and, particularly, to respect the "May Day" distress call.

"In many instances," he said, "we knew that boats were in distress but could not get through to them because of yacking on 2182 frequency, which should be kept open for distress and relief communications."

Continuing, Bowman warned against the common practice of captains running their boats on automatic pilot

(Continued on page 38)



New officers of the Texas Shrimp Association. Left; Sam Snodgrass, Secretary-Treasurer, and right; Oliver Clark, President, both of Port Isabel.

Abalone Transplanting Successful in California

Keith W. Cox discloses scientists hope to establish new abalone beds for commercial harvesting by divers*

A SHORT time ago, the California Department of Fish and Game transported 800 red abalone over a distance of several hundred miles in bait tanks, and transplanted better than 600 of them into a new area where red abalone were not established.

Only 660 of the original 800 abalone were tagged and replaced by the divers on the bottom, the remainder having injuries to soft parts, a general weakened condition or abnormal spacing of the holes in the shells. A check after the transplant revealed that of the 660 placed on the bottom, only 19 failed to survive the transplant. The remainder apparently adapted themselves to the new environment.

Since that first large-scale abalone transplant, other experiments have been conducted by the Department in an attempt to improve the methods and techniques. It has been determined that abalone will survive a transport, but the amount of time they can remain out of water depends primarily on the species.

Survival and general condition are improved if abalone during transport are not confined to a bait box, with circulating sea water, but placed in nets or sacks, kept out of the direct sunlight, and a constant flow of water maintained over them. Red abalone may be stored in live boxes in which they will live without food if kept submerged in freely circulating sea water for at least 70 days. The pink abalone of southern California require more careful handling than the reds; they cannot remain out of water for such long periods of time and must be kept constantly covered by streams of sea water, in addition to being covered to keep them out of the sun while they are in transit.

Further transplanting experiments are planned in the future, and it is hoped as in the past that by these methods it will be completely possible to (1) establish abalone in areas in which, although conditions appear favorable, they do not occur; and in areas where they are in such limited concentration that the addition of new stocks might help build up the sparse present population and (2) use abalone as a biological indicator, since they appear to be sensitive to certain chemical changes in the water.

It should be kept in mind that abalone transplanting is far from an established procedure. However, from the little that has been done, it is now known that if certain precautions are observed, it is possible to transplant abalone from one area to another of comparable environment, which has an adequate supply of food, i.e., seaweed, and is more or less exposed to the open sea.

The Japanese have done a limited amount of transplanting, but only experimentally. It is of interest to note that the abalones transplanted, which came from northern Japan, transformed themselves into what was formerly thought to be a distinct species confined to southern Japan.

Abalone Move Very Little

Abalone inhabit the rocky shore line in certain areas along the coast. They are found from high tide mark out to over 300 feet, with the maximum concentration between 25 to 40 feet.

Tagging experiments have shown that there is no migration and very little movement among abalone. These mollusks have been tagged and released in various depths

and distances offshore. Those that were released in shallow water (5'-8' deep and 10' offshore) and were collected by shore fishermen at low tides, showed a movement of a few feet. Those released in deeper water (20' and 25' offshore) never appeared on shore; when checked by divers a year later, these abalone were still in the same general area. Abalone tagged and released in still deeper water (40'-50' deep and up to ¼ mile offshore) are still in the same area of release after two years.

Evidence would indicate that although individual abalone may move around considerably, they will stay in a small area and not make any long trips. Abalone in the tidal zone have been observed to move over 100 yards parallel to the shore, but none ever have been observed which have moved from shallow to deep or deep to shallow water.

No Attempt to Cultivate Abalone Artificially

There has been no attempt to cultivate abalone artificially in California. All the abalone taken have been the result of natural propagation. Until recently too little was known of the early life history to attempt culture experiments. It is now known that spawning takes place in Spring and Summer (it was formerly thought that spawning took place during Winter) and that there is a free floating stage which probably lasts from eight to ten days. The small abalone then sinks and becomes attached to the bottom and starts to grow into an adult.

Although scientists now have a better but far from complete knowledge of the early life history, other considerations enter into any attempts to cultivate abalone. One of the principal difficulties is in collecting spat. The fishing grounds face the open ocean and weather conditions being what they are along the Pacific Coast, it is a matter of conjecture whether collecting equipment could be set and maintained during the spawning season.

Spat collecting nets recently were prepared according to methods suggested by Cedric Lindsay, Supervisor Shellfisheries Investigation, Washington Department of Fisheries, but the abalone did not mature at the expected time, although in previous years in this same area the majority of the abalone were in spawning condition.

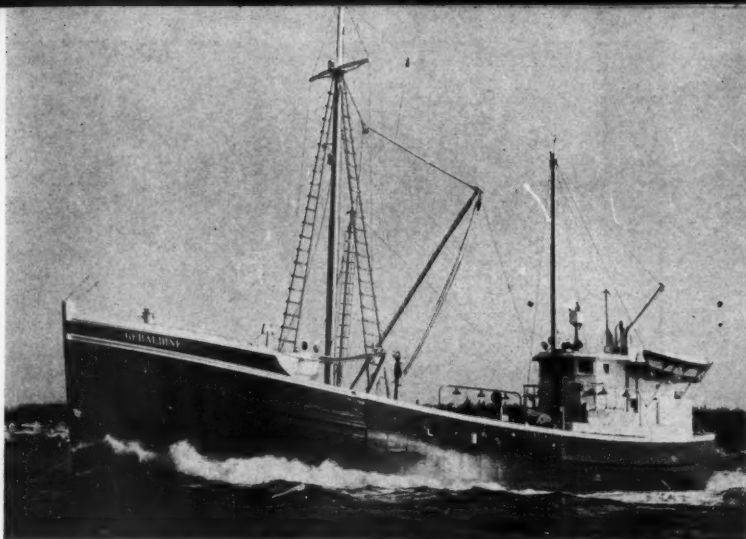
Accurate growth rate is not known, but it is strongly suspected that the young abalone grow to about one inch in diameter the first year, and when they reach 4 to 5 inches in diameter they are probably 3-4 years old. From then on the growth rate varies.

In some areas growth is fairly uniform, with the majority reaching a size of eight inches or more. Most of the growth takes place during the Winter months, with some abalone adding as much as 1½ inches in shell diameter during this period. Some abalone will reach a maximum size and grow no more; others apparently keep on growing. (Abalone up to 11 inches in diameter, while not common, are not unknown). In some locations the majority of the abalone are under 7½ inches, while in other areas, oftentimes close by, abalone of the same species are almost all 8 to 9 inches in diameter. The causes for this difference in growth are not known.

Previously it was thought that growth was constant and that the size of an abalone was directly proportional to its age. It is only recently that the Department's investigation has disclosed the fact that growth rate is not constant, but varies from area to area for the same species, also from species to species in the same location.

(Continued on page 31)

* Marine Biologist, Abalone Investigation, California Department of Fish and Game. Material for the above article was based on Mr. Cox's Oyster Convention paper.



Trial run of 93' scalloper "Geraldine" built by Harvey F. Gamage, So. Bristol, Me. for Joseph Perry, New Bedford, Mass. Right, Capt. Leif Lomeland holds remote control of vessel's Bendix automatic pilot.

Scalloper "Geraldine" Built to Fish in Any Weather

ONE of the largest scallop draggers ever built for the New Bedford, Mass. fleet, the 93-foot *Geraldine*, completed her maiden voyage on January 27 with a 110,000-pound haul. She was built by Harvey F. Gamage, Shipbuilder, of South Bristol, Maine for Joseph Perry, a general contractor of New Bedford. A duplicate sister ship with similar equipment, to be named *Sandra Jane*, will be launched for Perry at the Gamage yard this Spring.

No effort was spared in making the *Geraldine* one of the most ruggedly constructed and best equipped vessels in the fleet. She represents an investment of \$150,000, and her large size will enable her to fish in practically any kind of weather. Capt. Leif O. Lomeland is her skipper, and the crew totals 11 men.

Construction and outfitting of the new scalloper was supervised by Capt. Elmer Jacobsen of New Bedford. With minor exceptions, the vessel's design follows that of the *Louise*, which was formerly owned by Jacobsen.

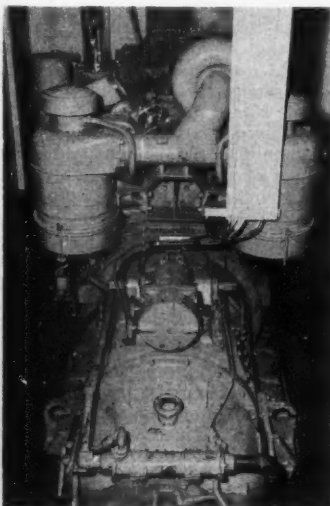
The *Geraldine* is a heavy, full bodied boat with round stern, and has tonnage of 136 gross and 93 net. Beam is 21'6" and draft is 10'. She has 10" sided oak keel; double 4½" sawn, molded frames; 2¾" oak planking and 2¾" pine decking. Fastenings are galvanized.

The deck house is sheathed with ¾" Marine Exterior plywood on the outside, and ¼" plywood inside. The engine trunk is fabricated from 3/16" steel, and the fish hold bulkheads contain Fiberglas insulation. The name plates and scrolls are hand carved. Paint and varnish for the topside and interior are of Pettit brand, while International paint is used on the bottom.

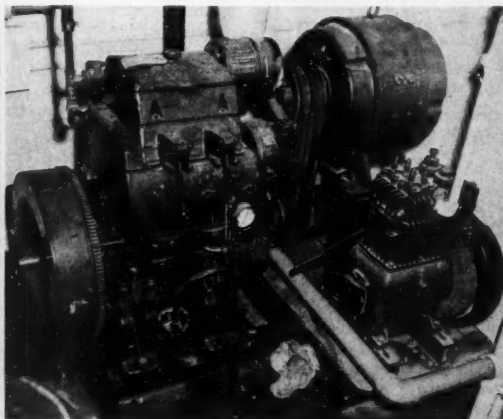
A D397 Caterpillar Diesel, furnished by Perkins Machinery Co., Inc., supplies propulsion power. The engine is rated 480 hp. at 1225 rpm., has Snow-Nabstedt 2.97:1 reduction and reverse gear, and drives a Columbian, 3-blade, Style MH, 60 x 40 propeller on a 5½" Tobin Bronze shaft. Goodrich Cutless, rubber stern bearing, Hathaway stuffing box and Hodgkins bronze rudder post are used.

The vessel has a large after cabin with accommodations for four instead of the usual two. There are 10 built-in berths in the fo'c's'le, each with individual reading lamp. The galley has Shipmate oil burning range, stainless steel double sink and built-in refrigerator with Fiberglas insulation. Two galvanized tanks under the fo'c's'le floor

(Continued on page 34)



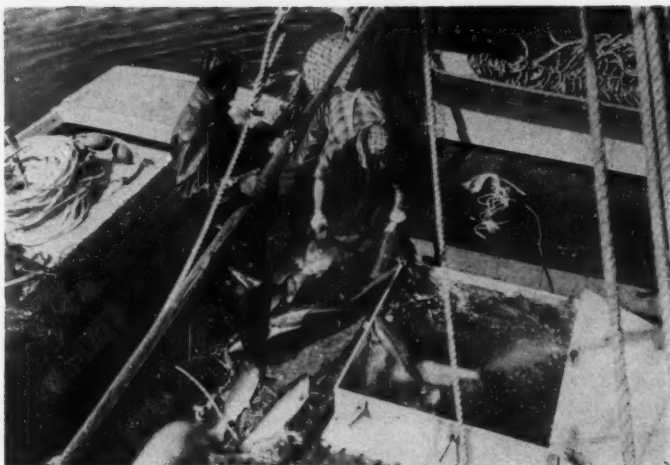
Left: the "Geraldine's" Caterpillar Diesel with Snow-Nabstedt reduction gear; below: Deseco-Lister Diesel auxiliary unit; right: RCA Radiomarine radar and telephone and Hallicrafters receiver.



Refrigerated Sea Water Used Successfully On Canadian Halibut Boat

Operating Results Reported At
Fisheries Research Board Meeting

Loading a catch of halibut
aboard "Silver Viking" for
refrigerated sea water tests.



A REPORT on the application of refrigerated sea water to halibut fishing, in which long holding time is required by the length of the trip, was made at last month's annual meeting of the Fisheries Research Board of Canada at Ottawa. Continued tests with the refrigerated sea water for the transport and storage of fish have proved the system to be of value to commercial fishermen of the Pacific Coast.

The *Silver Viking* was designed as a combination salmon seiner and halibut long-liner, making it possible to also study the application of refrigerated sea-water holding to salmon seining. The vessel a typical Pacific salmon seiner of wood construction, is 78' long. Six tanks were installed in her hold, three on either side of the shaft. The tanks were constructed of 3/16" steel plate and the surfaces unsupported by the hold lining are made sturdy by angle irons toe-welded on 2' centers. The inside surfaces were treated with an Epoxy-resin coating to resist corrosion and 2" of cork insulation were applied to the external surfaces.

In each tank cooling coils were made of 250 feet of 3/4" O. D. steel tubing. When assembled the coils were hot dip galvanized. The coils are enclosed in compartments along with the inboard tank sides. A separate circulating pump for each tank provides circulation of the chilled sea water through the compartments. Refrigeration to the coils is provided by two compressors, one for the three port tanks and one for the three starboard tanks.

A completely separate refrigeration system comprised of a shell and tube chiller, circulating pump and refrigerant compressor augments the main system. It is used to speed up the initial cooling of any one tank but it may also serve as a stand-by system in event of failure of the tank coil system. All pumps are electrically driven by two diesel-driven alternating-current generators.

During July and August, the *Silver Viking* engaged in salmon seining, bringing round sockeye and chum salmon to port in excellent condition after the weeks fishing. Sockeye was still judged to be excellent after additional sea-water storage to a total of 14 days. Round coho and jack spring suffered loss of scales and skin pigment. Dressing all fish of that species overcame the trouble, but dressing individual fish did not. The theory is, damage was caused by a destructive enzyme disgorged with the stomach contents of actively feeding fish.

The *Silver Viking* engaged in halibut fishing in September, catching 36,000 pounds. Catches were sold 8 to 15 days after taking, in excellent marketable condition. Samples were held in tanks to a total of 29 days and were still in good condition.

Many advantages were demonstrated by these trips, which may be of future value. The ship's ability to operate in areas remote from canneries or packers. The value of some types of fish delivered directly to the port by the ship is increased. No time is lost in daily delivery of the

fish. The elimination of icing the fish increased the effectiveness of the crew, enabling them to make larger catches in times of good fishing.

Special interest was taken of the chiller which was designed as an emergency system and to assist in the initial cooling of the sea water. Since the latter was of greater importance the chiller was designed with a close tube spacing to permit high water velocity and high heat transference from the tubes. It was not expected to permit attaining low temperatures but, it was possible to cool the water to 30 degrees Fahrenheit. The success of the chiller showed that small chillers could be relied on entirely for the cooling without employing tank coils. This would in turn effect other components. The same guarantee against failure could be obtained with two compressors and two chillers as is now afforded by three compressors. Removal of the coils from the tanks would simplify maintenance and permit use of cheaper corrosion resistant coatings.

Reports on Salmon Research

Other important scientific research was emphasized at the Board's annual meeting. Fisheries Minister J. Angus Maclean pointed out the importance of such research. He said that this continent was a virgin territory until within the last 400 years. Now the impact of rapid increases in population on natural resources is evident.

Older civilizations have been faced with the problem and lack of conservation may have contributed to their passing. Maclean said that it is not enough to learn what the problems are and find ways to solve them. It is necessary also to gain public support.

A report was given on the intensified study of Pacific salmon, now extended to the high seas. Members of the staff of the Nanaimo, B.C. biological station carried out part of an international program of sampling salmon throughout their range in the North Pacific.

Biological characteristics have been discovered which can show whether the salmon found far from shore are of Asiatic or North American origin. Research has shown that species of North American origin intermingle with those of Asian origin over a broad area of the central Pacific and Bering Sea.

The Fisheries Research Board heard a report on the use of scent to deter salmon from waters that are detrimental to their existence. Although manufactured scents are common, scientists have been unable to actually duplicate the scent of man. It was noticed accidentally in 1953, that the skins of salmon predators gave off a substance, which when placed in water, alarmed the fish.

Further tests were made, but nothing gave such a strong or overall reaction than rinses from human hands. Scientists of the Fisheries Research Board have isolated a substance known as L-serine which has a repellent effect on salmon.

Two 73-Ft. New Design Hatteras Draggers

**"Millie" and "Dottie-Irene"
Operate from Atlantic City**

THE first in a new series of 73-foot draggers built by Morehead City (N. C.) Shipbuilding Corp., *Millie*, was delivered recently to Capt. Slavo Djurkovich of Absecon, N. J. The new design replaces the 68-foot draggers the company previously built. Retaining the best features of its forerunner, the new boat is completely redesigned and is more rugged and commodious than its predecessor. The dragger has a beam of 20 feet and a nine foot draft, and is built for Northern waters.

The *Millie*, like another in the new Downeaster Series of Hatteras vessels, Horace A. Donaldson's *Dottie-Irene*, is powered with a 6-110 General Motors Diesel rated at 210 hp. at 1800 rpm., with a reduction gear ratio of 4.5:1. Their 52 x 38, 4-blade Federal propellers are mounted on 3" Tobin Bronze shafts.

Millie's foremast is stepped on the keel. When used as a dragger, the gallows frames are on the starboard side. However, the aft gallows frame can be moved to the port side forward and the boat can be used for scalloping as well. She is equipped with scallop boxes and washers. A model 1353 Hathaway winch hauls the nets.

Other equipment aboard the *Millie*, which hails from Atlantic City, includes eight 32-volt Surrrette batteries, a Ray Jefferson radio telephone, two APN-4 loran direction finders and two Jabsco pumps. There is also a Danforth anchor, One-Mile-Ray searchlight, and Wall rope.

The *Dottie-Irene*, captained by John T. Olsen of Atlantic City, N. J., is rigged with two gallows frames on the starboard side. The vessel's Hathaway model 1353 winch is mounted on oak beds.

A new method of installing the deck house has been used. The house is mounted on a steel trunk and bolted every twelve inches through each deck beam. The trunk sill sits directly on the deck beams and is bolted to each one. Each bolt is accessible for tightening when necessary. Space is left between the turtle back and the transom to permit passage and allows for installation of a towing bit on the transom.

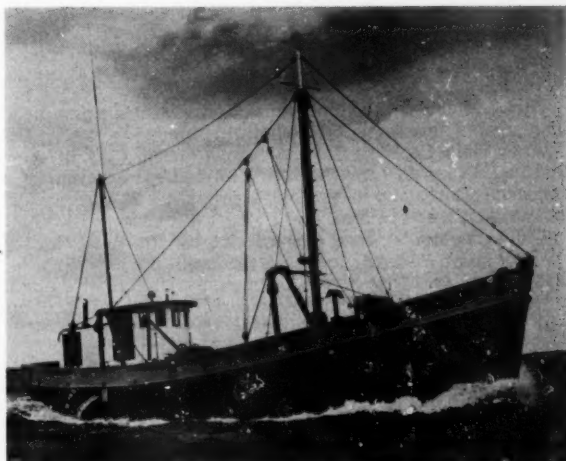
The captain's quarters contain a built-in bunk with drawer space underneath. The two loran sets are mounted above the cover of the engine room entrance, allowing full use of the chart table space. Entrance to the engine room is from the turtle back, insuring privacy of the captain's quarters.

The fo'c's'le contains eight built-in bunks, a large folding table, large countertop, and galley sink with a pump. The Shipmate stove is connected to a new type ventilator which has a breather to draw out odors by natural draft.

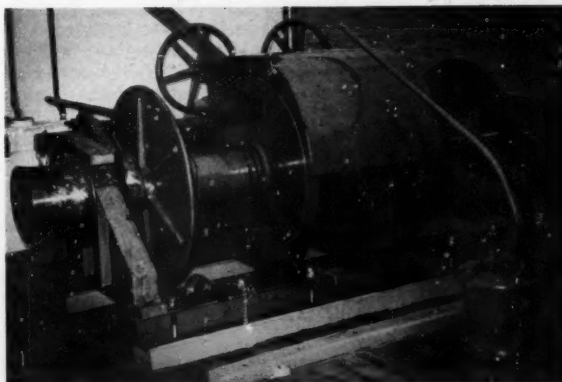
The auxiliary generator is a 3000-watt Onan. The pumps are Jabsco and a hand-operated auxiliary pump is mounted on the main deck. Electronic equipment includes a Raytheon radio telephone, Raytheon depth recorder, and the two loran units. Other equipment consists of an 85-pound Danforth anchor, and One-Mile-Ray searchlight, and Wall manila rope.



First of the new 73' draggers series from Morehead City, (N.C.) Shipbuilding, the "*Millie*" is owned by Capt. Slavo Djurkovich of Absecon, N. J. Her power is a 6-100 General Motors Diesel.



New 73' dragger "*Dottie Irene*" built by Morehead City Ship Building Corp. for Horace A. Donaldson of Atlantic City, N. J. She has a 6-110 General Motors Diesel.



Hathaway trawl winch and Edson deck pump aboard the "*Dottie Irene*". The reduction gear winch has 20" wide drums and large flange bronze winch heads.

NORTH ATLANTIC

New Bedford Seafood Catch Shows Good Increase

Fish production totals for 1957 displayed more than a 15 million pound increase over 1956, according to the New Bedford office of the Fish & Wildlife Service. The increase was largely due to the heavy trash fish landings. It was the second best year of this type of fishery for the port, with a total of 46,676,300 pounds. The largest year was 1950 when 56,000,000 pounds were landed.

The scallop total was the best on record with 16,457,900 pounds. The previous high was in 1955. Skippers and fishermen alike admit that the shellfish is not as plentiful as formerly and that to meet the problems, bigger boats are being built to fish in all kinds of weather and the older vessels are being re-powered.

Yellowtail production in 1957 was the top year since 1949. Most of the fleet concentrated on the specie from July through December. Haddock and cod landings were down due to the work for yellowtails. Both scalloping and dragging netted higher financial yields in 1957.

Quaker Oats Pet Food Plant To Buy New Bedford Fish

The Industrial Development Commission announced that signed agreements had been made between the Quaker Oats Company of Chicago and the City of New Bedford. Plans call for the firm's immediate erection of a pet food pilot plant in the city's proposed 57-acre waterfront maritime terminal.

The agreements were carried out by the new Harbor Development Commission and received the approval of Mayor Lawler. They cover options on a 20-acre site north of the New Bedford-Fairhaven bridge. The pilot plant will use 1½ acres with the rest for construction of a permanent plant if the tests are successful.

John E. Christensen, pet foods production manager said "no commitments exist at this time except for construction of a pilot plant. The future is wholly dependent upon the success of this initial test operation."

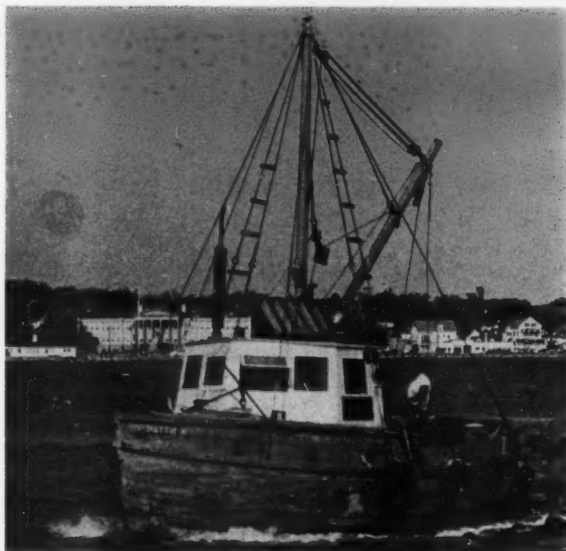
During the two-year period of lease the company will explore the economic and technical feasibility of locating a permanent industrial plant for the manufacture of Puss 'n Boots cat food. "Actually it will be a small operating plant with full scale equipment. It will contain a single assembly line of machinery for processing, cooking, canning and packing the product," Christensen said. "Only three or four persons will be involved."

Trash fish bought from boats in the New Bedford fishing fleet, though less than a boat load at a time, will be used in the operation of the pilot plant. "We'll have to go through at least a complete, 12-month cycle of the fishing season in this pilot plant operation to learn what times of the year the trash fish supply is best and when it is slack."

Dragger "Eugene and Rose" Sinks

The New Bedford dragger *Eugene and Rose* Capt. Eric E. Besso sank in choppy seas 15 miles southeast of Block Island January 21. Her four-man crew was taken aboard the New Bedford dragger *Sanson Joy*, Capt. Edward Avila of New Bedford.

Five months ago the *Eugene and Rose* hit a submerged object on Great Brown Round Shoals and was towed into New Bedford after a 14-hour ordeal to save her. Eric J. Besso of New Bedford, owner of the sunken craft, reported the vessel's replacement value at \$40,000.



"Hattie M.", the boat belonging to Capt. Frederick M. Pierce of Riverside, R. I., has a Chrysler Crown engine 3.5:1 reduction gear turning a 28 x 24" wheel.

Appointments to Gloucester Commission

Appointments to the Gloucester Fisheries Commission for 1958 were announced late last month by Commission chairman Mayor Beatrice K. Corliss. Council vice-chairman Manuel F. Lewis replaces former council vice-chairman John J. Burke, Jr.; councillor William P. Cafasso was reappointed and councillor Robert D. Tobey replaces former councillor Donald J. Ross.

Also appointed were Solomon Sandler, Lawrence C. McEwen, Manuel P. Domingos, Jr., Salvatore Ciaramitaro and Joseph M. Cody. All appointments are for a two-year period.

Gloucester Loses Two Dragger

Two Gloucester draggers went to the bottom last month, but without the loss of any lives. On the 3rd of January the 87-ft. dragger *St. Anthony*, Capt. Carlo Parisi blew off her stern and sank about 50 miles off Cape Cod.

The *St. Anthony*, valued at \$100,000 went down in 92 fathoms shortly after Capt. Parisi and his men lowered a second lifeboat and were picked up by the *Holy Name*, Capt. Carlo Mocerri. The first lifeboat lowered by Capt. Parisi was smashed to bits against the side of the dragger, but the second boat was safely launched and the seven crew members rowed cross to the *Holy Name*.

The second Gloucester dragger to go to the bottom last month was the 55-ft. dragger *Helen B.*, Capt. Carl Corrao. The vessel developed a leak while dragging for whiting off Cashes Ledge and sank less than one hour later.

Atlantic Coast Fisheries in Merger

Atlantic Coast Industries, Inc. Boston, has been approved by stockholders as a new corporate name which encompasses The Atlantic Coast Fisheries Co., Bridgeport Rolling Mills Co., Industrial Metals Corp., Industrial Chemical Specialties Corp., International Chemical Specialties Corp., Brickseal Refractories Corp., Saverite Engineering Corp., Xzit Chemical Corp., and Fish Machinery Corp.

The Atlantic Coast Fisheries Co. and its predecessors have been producing sea food products for over thirty years and were the inventors and developers of automatic machinery for handling and processing seafood for freezing and packaging. The fishing unit will continue its operations as in the past.

Maine 1957 Sardine Pack Over Two Million Cases

An official 1957 pack figure of 2,117,150 cases of Maine canned sardines was released by the Maine State Department of Agriculture on January 3. The total was about 5 percent less than the 2,221,000 cases produced by the industry in 1956. The 1950-56 average was 2,485,000 cases.

There were 37 plants in operation during the season. The production was split about half and half between the eastern and western sections of the Maine coast. Washington County, traditionally the sardine capitol of the world, had its best run of fish in five years and generally the schools were plentiful all along the coast.

The industry's research and quality control laboratory at Bangor functioned efficiently during the season and contributed towards making the quality of the pack the best in years.

Maine Lobsters in Disney Newsreel

Nine Maine youngsters were featured in a film on Maine lobster fishing which was shown on January 22 on a coast-to-coast network television program.

Filming of the story took place last spring at Stockton Springs. Members of the local high school's science class, who have been studying fisheries education units prepared by the Dept. of Sea & Shore Fisheries, served as actors.

V-Notched Lobsters Illegal in Maine

Sea & Shore Fisheries Commissioner Ronald W. Green last month asked Maine fishermen to remember that the taking of V-notched lobsters is still illegal.

Through some misunderstanding, many lobstermen thought that the taking of V-notched lobsters had been made legal, but Green assured them that such was not the case, and he added that in the future, as in the past, all cases involving V-notched lobsters would be prosecuted.

Massachusetts Boats Get New Engines

New D375 Caterpillar Diesels have been installed in the New Bedford, Mass. draggers *Catherine C.*, owned by Capt. Joshua Murphy and Capt. Charles Topper's *Mary Ann*. Sold by Perkins Machinery Co., Inc., the engines are rated 300 hp., have Snow-Nabstedt 3:1 reduction gear and Twin Disc 3:1 front power take-Off for the winch. D. N. Kelley & Son handled the *Catherine C.* installation, while Hathaway Machinery Co. equipped the *Mary Ann*.

The *Eunice & Lillian*, owned by Capt. Lief Michalson, was repowered with a D375 Caterpillar Diesel at Norlantic Diesel, Inc., who made extensive repairs to the boat, including new pilot house and steel trunk.

Hubbs Engine Co., Boston, recently has sold General Motors 6-110 Diesels for several Massachusetts draggers. The repowered vessels include Capt. Shirley Mitchell's *Lubenray* of Fairhaven, with 50 x 36, 5-blade Columbian propeller; the *Camden*, owned by Myron Marden of New Bedford and skippered by Capt. Bernard Bolduc, both installed by R. A. Mitchell Co.; the *Sharon Louise*, owned by Hervey Tichon of New Bedford and skippered by Capt. Ray Feener, installed by D. N. Kelley & Son with 50 x 36, 5-blade Columbian propeller.

In Gloucester, new GM 6-110 engines have gone into the *St. Peter*, owned by Thomas Lupo and Busty Scola; and the *Jackie B.*, owned by Benny Randazza. These installations were made by independent Machine Co. and have 52 x 38, Style I, 3-blade Columbian propellers, Maxim Silencers and Marmac Controls. All of the new engines have 4.5:1 reduction gears and 3:1 front power take-off, and are rated 220 hp. at 1800 rpm.



Capt. Dana Knight's 37' x 10'6" x 36' boat "Nandales" which is used for seining and lobstering out of Kittery Point, Me. She has a model 6DAMR-273 Allis-Chalmers 85 hp. Diesel with Capitol 2:1 hydraulic reduction gear, sold by Harbor Supply Oil Co., Portland, Me.

The Boston dragger *Manuel F. Roderick*, owned by Capt. Vincent Gandolfi of Medford, Mass. has been equipped with a new FR2 Lister Diesel by Diesel Engine Sales & Engineering Corp. The engine replaces one of similar make used in the vessel's auxiliary unit, and the necessary modifications were made to utilize the existing generator, compressor and bilge pump.

Trends in Redfish Supply Cited

George F. Kelly, a marine biologist of the Fish & Wildlife Service attached to the Woods Hole Oceanographic laboratory, at a talk in Gloucester last month, stated that ocean perch or redfish are one of the slowest-growing, oldest-living fish in existence. One caught recently, scientists determined, had a life span of more than 40 years.

He brought out the fact that the continued good yield of a fishery depends upon a balance of those fish which died, those caught and those which survived. Only a balance of these categories will insure maintenance of the species in the years to come.

According to Kelly the outlook for ocean perch in the next 10 years is one of a slow decline in the number of fish in local waters. But in the North Atlantic there is still a good supply.

Asks If New York Waters Radioactive

New York Assemblyman Leo A. Lawrence of Herkimer, fearing that atomic waste might be making the state's shellfish radioactive; recently wrote to the Atomic Energy Commission, asking what the state legislature could do to protect oysters, clams and scallops from the by-products of atomic power plants.

Lawrence pointed out that an atomic power plant is under construction on the Hudson near Croton. He wondered if there would be any danger to the life of the aquatic inhabitants of the waters bordering on such installation. He also asked if there might be a hazard resulting from atomic breakdowns.

Seek to Lift Ban on Long Island Scallops

Last month Assemblyman Irving L. Price, Jr. of Greenport requested the Commissioner of Conservation to open certain Long Island waters to "bugging" to prevent the waste of scallops and to provide a chance for local baymen to realize some income from these scallops. He said that the loss of the scallops if not salvaged would work an economic hardship upon the baymen dependent upon scalloping at this time of year for their livelihood.

New Jersey Fishing Industry Expanding in Cape May Area

Sale of the Bree-Zee-Lee Yacht basin at a reported price of \$100,000 has raised to nearly one million dollars recent land sales in the area between Wildwood Crest and Cape May. Most of the sales have been to commercial fishing groups or to allied industries and indicates a rising interest in the industry and the possible rebuilding of Cold Spring as a major fishing center.

The first sale in the area was the purchase of Cold Spring Docks from the Cold Spring Fish & Supply Co. by the J. Howard Smith Corp., one of the biggest commercial fishing boat operators on the coast.

Other sales include the purchase of a docking area by the Snow Canning Co. just west of the Ocean Drive drawbridge. Snow's purchase included meadowland and dock space, which has since been expanded to include a plant for shucking clams. Snow is completing dredging operations which will permit the docking of 25 clam boats.

Another major sales reported for the Cold Springs area was land in Lower township bordering Sunset lake south of Wildwood Crest. Purchaser of this land was Marine Products Co. Lund's Fisheries also made a purchase in the area near the toll bridge, and it is reported that Lund's is constructing dock facilities north of Ocean Drive at the west end of the drawbridge.

Also included in the development picture is the creation of new, usable land which was marshland on both sides of the County Canal near Cape May Harbor. Another recent addition which is still being enlarged is Utsch's Dock, a marine harbor for more than 100 boats, south of the Cape May entrance to the canal.

Rutgers Studying Oysters in Delaware Bay

Dr. Harold H. Haskin of Rutgers University is doing much to improve the oyster business in New Jersey. He is to succeed Dr. Thurlow Nelson of Court House as head of Rutgers far-flung operation in marine biological research. For several years now the university has been studying the Delaware bay and the possibility of rehabilitating the natural oysters seed beds located near the head of the bay.

As a result of the decline of the seed beds, Delaware bay planters now obtain only one-third of the seed oysters needed. Rutgers scientists have traced the decline to a reduction of the stock of parent oysters. Now they have set out to determine the size of the breeding population that must be maintained for an optimum yield of seed oysters and ways to build up the population to this level.

Dr. Haskin is sure oysters again will abound in Delaware bay and his chief concern now is to keep the industry supplied with seed while the seed beds are building to higher levels.



Fishing draggers in harbor at Stonington, Conn.

Rhode Island Rules Against Discrimination for Striped Bass

The Rhode Island Supreme Court last month reaffirmed the right of the state legislature to regulate the taking of striped bass by commercial fishermen in the state's waters, but emphasized that the legislature cannot discriminate for or against any group.

The opinion was written in reply to a Senate resolution which asked if the legislature had the power to enact a law prohibiting commercial fishermen from taking striped bass from the waters of the state.

In its advisory opinion, the high state court said that the legislature cannot grant more rights to commercial fishermen than it does to others, and in a similar manner cannot permit one class of citizens to take bass while prohibiting entirely the taking of the fish by commercial operators.

Point Judith Plant Gets Record Catch

The largest catch of edible fish ever landed in the state was put ashore at the Point Judith Fishermen's Cooperative by the *Ocean Clipper* at Galilee on January 13. The dragger unloaded 53,000 pounds of scup after a three-day trip 80 miles southeast of Block Island. It was reported to be the largest catch of this particular specie known to be landed in a Rhode Island port.

The fish were boxed and were on trucks by night headed for the New York and Philadelphia wholesale markets.

Fishermen Have Need for Better Stonington Landing Facilities

Spokesmen for the Southern New England Fishermen's Assoc. stressed the fact that the loss of Stonington landings with its resultant loss of revenue, sharply points up the need for more adequate facilities for unloading the catches in Stonington.

Stonington fishermen landed only about 35 percent of their total catch at their home port of Stonington during 1957, according to a survey made recently.

Figures reveal that a total of 10,525,600 pounds of market and industrial fish was brought in to Stonington docks during 1957. On the other hand some 35 to 40 million pounds was landed by Stonington draggers at other ports in New England.

Many Stonington draggers take their hauls in to New Bedford, Woods Hole, Point Judith and other ports where good unloading facilities are available, but they would bring them in to Stonington if proper facilities were available.

Connecticut Fisheries In Good Shape

The fishing industry in Connecticut, according to the opinion of John B. Bindloss of the Bindloss Marine Station in Stonington, is still good. Bindloss recently reported that while Connecticut fishermen continue to be well rewarded for their efforts, northern New England fleets are reporting rather rough times. He recommended that anyone who likes fishing should join the industry, and added that most Connecticut fishermen are making a go of it at the present time.

PACIFIC COAST

New California Council To Promote Fisheries

A need for united action in the fishing industry of California was brought out at a meeting of the Southern California Fisheries Association in Monterey, January 17-18. A general discussion of problems faced by the industry was held, during which each speaker stressed the necessity of such unity. A report from a special committee outlined the recommendations of a plan for a state organization.

The organization, to be named the California Fisheries Coordinating Council, would be open to any individual, firm, or organization interested in the fisheries of California. A non-profit corporation, its purpose would be to promote the welfare of the fishing industry and those allied and interested in it, and to provide legislative representation in order to promote beneficial legislation for the industry.

A committee of ten, five from the south and five from the north of the state, will be formed, each section to select its own delegates from the industry at large, in that area. The delegates are to prepare a detailed plan for a state organization, establishing a coordinating council along the recommendations of the special committee. A date will be set by the chairman for a meeting at which the full committee will combine and harmonize the suggested plans. The resulting plans to be presented at a future general meeting of industry members.

The members were informed that money must be found to match the \$37,000 of Federal funds available for industry education in California. Individuals and organizations will address the governor and ask that \$37,000 from the special emergency fund be used to match the federal funds, the amount to be reimbursed by an appropriation in the next budget.

The California Agriculture Marketing Act and the help it has given agricultural groups was discussed by Neal Hurd. The idea of a marketing Act for the fishing industry was so well favored that a committee has been set up to study the subject and report at the February meeting.

Striking Crab Boats Idle

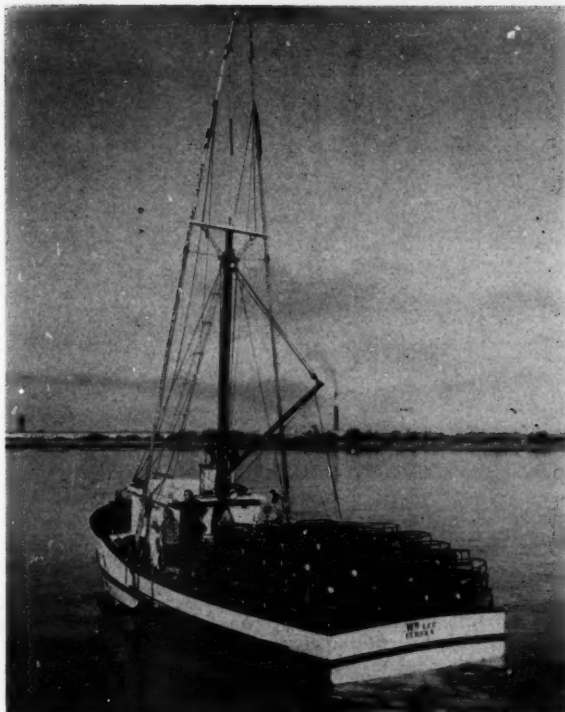
Crab fishing boats from Eureka to Crescent City have been idle since January 18 as the result of a strike over prices. Crab fishermen in Crescent City are asking for a two-cent boost per pound over the seven and one-half cents previously paid.

Eureka and Trinidad fishermen are seeking ten cents per pound or two cents more than the prevailing price. The half-cent differential over the Crescent City price is attributed to transportation costs. About 150 boats are affected.

In spite of rough seas and stormy weather 40,000 pounds of crabs were brought into the Hallmark dock in Trinidad during the last week of December. In the first week of January the Tom Lazio Fish Co., Inc. of Eureka was averaging about three tons of crabs per day.

Mackerel Landings Increase 20%

California mackerel landings during the 1957 season through November totaled 69,000 tons, a gain of 13,200 tons or 20 percent as compared with the 1956 season's landings of 55,800 tons for the same period. The increase was reflected equally in Jack and Pacific mackerel. The production could have been substantially greater if the boats had not been placed on daily catch limits during most of the season.



Loaded with crab pots and ready for fishing is the "Wm. Lee", 42' 9" general purpose craft built by owner Monroe Guy from Eureka, Cal. and William Yost, shipwright. The boat is used for crab, tuna, shrimp and salmon fishing. Power is supplied by a 165 hp. Graymarine Diesel. Constructed of Port Orford cedar and Douglas fir it is operated by a two-man crew.

Predict Good '58 Sardine Season

Although the California sardine fishery was not very successful in 1957 there are some encouraging signs for future years, noted in the abundance of huge schools of small sardines which will be of commercial canning size for this year's sardine season. Large schools of small fish have been spotted by fishermen in many locations from San Diego to Eureka in normal fishing areas. If these sardines remain in California waters through next season the potential catch should be tremendous.

New Boats Join California Fleet

Two new boats have joined the Trinidad fishing fleet. They are the *Nora Lombardo* owned by Bruce Campbell and the *V. Lombardo* owned by Otto Kraasch. The sister boats, almost identical in make, are 30 ft. long with 9 ft. 6 in. beams.

The 24-ft. *L'Arc* was launched in Moss Landing recently by Tom Perry, builder of the craft. Twin Gray 109 hp. engines installed by Phil Hover of Hover Equipment Co. powers the boat which has joined the winter fleet at Moss Landing.

Results of San Diego Tuna Auctions

Approximately 22,720 tons of tuna were sold at auctions conducted by the American Tunaboat Association in San Diego in slightly over four months last year. The new method of handling tuna was inaugurated by the Association last August and was participated in by 97 tuna vessels in the fleet and by five San Pedro and two San Diego canneries.

Prices started at \$230 for yellowfin and \$190 for skipjack at the first auction. Prices rose gradually during the next few months hitting a peak of \$280-\$240 in mid-



The "Libby 21" is a 37' purse seiner operated by the Moser Bay Cannery. She is powered with a Chrysler Royal engine rated at 143 hp.

October. Since then prices have stayed fairly level at \$270 for yellowfin and \$230 for skipjack.

San Pedro tunaboats meanwhile have been tied up since the beginning of the year as the Fishermen's Cooperative and the canneries have held preliminary talks on contracts. Local tuna boat owners feel there is some possibility that a similar auction system may be proposed here if both sides do not soon agree upon a price for the coming year.

Fisheries Education Survey in San Pedro

First phase of a special survey to determine if special educational means could be of use in solving problems of the fishing industry is now being conducted in the San Pedro area by Ken Williams, of Harbor Junior College, Wilmington Calif.

Williams, along with David Allen of the State Dept. of Education, is surveying the area to find out first the specific problems of the industry. Second phase of the project, which will start later this year, will be a study in how special classes in skills used in the industry could help solve some of its more pressing problems.

Some classes already suggested by local industry spokesmen include classes in fish marketing, navigation, marine engines and other skills used aboard fishing boats.

Japanese Have Tuna Problems Too

After a three weeks' tour of Japanese tuna fishing ports, tuna boat leaders in San Diego are convinced that Japan has a lot of tuna problems, too. Joseph Madruga, president of the American Tunaboat Assoc. and W. M. Chapman, the Association's research director, recently returned from the Far East, where they visited Japanese shipyards and cooperative marketing centers, and talked with many tuna boat owners.

The most surprising was the fact that the Japanese boat owners want higher prices for their tuna. They don't want to undercut us because they are losing plenty of money as it is. Madruga said that visits aboard many Japanese tuna boats convinced him that the Japanese owners are not kidding about being "in the red". The boats all show lack of upkeep and the need for better gear. Owners explained that they cannot make enough profit to keep their vessels in good shape.

Japanese boat owners have little voice in prices set on tuna for export to this country. Foreign marketing is done by a government cartel. They found a marked slow-down in new tunaboat construction in Japan because of high costs of construction and reduced profits. This is a sharp contrast to the past few years when the Japanese tuna fleet was building at a fast rate.

Use of "Gulf Type" Trawl Allowed for Oregon Shrimp

With the imminent development of a new shrimp fishery off the Oregon coast, three biologists of the Oregon Fish Commission have recently been conducting tests with a Gulf-type semiballoon shrimp trawl to determine what kinds of fish are caught by the net in addition to shrimp.

The "gulf type" shrimp trawl is now recognized by the Oregon fish commission as lawful shrimp fishing gear in Oregon waters. Previous regulations permitted the use of only the beam trawl for shrimp fishing in Oregon. The commission liberalized the shrimp gear designation on the basis of preliminary investigations by staff biologists that indicated the gulf type trawl does not appear to be seriously harmful to young food fish species. However, additional restriction of the shrimp fishery may be necessary at a future date for the protection of the shrimp and other food fish species.

The biologists are particularly interested to learn the percentages of juvenile English, dover and petrale soles that come up with shrimp catches. Another purpose of the experimental fishing is to see if a semiballoon trawl will catch adequate samples of tiny dover sole needed for age and growth studies of this commercially-important species.

The Commission research staff at Astoria, who have been doing the trial fishing, report that initial testing of the Gulf-type trawl has indicated many different species of fish intermingled with good catches of shrimp. The best shrimp catches of 1,600-1,800 pounds an hour of fishing were made 30-35 miles offshore at depths of 70-80 fathoms between the Astoria lightship and Tillamook rock. The test fishing was done aboard the *Roseann Hess*.

Fishing Regulations Changed

Several recent actions by the Oregon fish commission involving commercial fishing regulations changes were announced recently because there had been some confusion as to what changes had actually been made.

Crabs—a limit of three crab pots or rings per fisherman seeking crabs for personal use only is now in effect.

A conditional 15-day extension of the closed season for commercial crabbing in ocean waters of Oregon north of Cascade head has been approved by the fish commission. However, the extended closure will not take effect until a similar season is provided for in Washington coastal waters.

Petrals sole—a longer winter closed season on petrale sole fishing has been set and is now in effect. The new closure extends from December 20 to April 15. Trawlers fishing for other species will be permitted to land only 3000 pounds of incidentally-caught petrale sole on not more than two fishing trips per month during the closed period.

Although Oregon dragnets do not normally fish the stocks of petrale sole off northern Washington and British Columbia in the winter months, the Oregon closure was considered necessary to prevent sizeable deliveries in Oregon of petrale sole caught from the depleted stocks in the northern area.

Day Made Oregon Fisheries Director

Harold V. Johnson, chairman, Oregon Fish Commission, announced last month the appointment of Albert M. Day as director of the State's Department of Fisheries. The appointment became effective the first of February.

Mr. Day was Director of the Fish & Wildlife Service from 1946 to May 1953. He left government service in June, 1955, after a 38-year career, to take a special assignment with the Arctic Institute of North America.

Washington Shellfish Catch Shows Sizable Increase

Total production of foodfish and shellfish in Washington commercial fisheries during 1957 reached 147,303,800 pounds, higher than the 1956 total although total salmon landings were among the lowest ever recorded in the state in odd or pink salmon years.

The state-wide catches were increased by above-average landings of shellfish, including 2,300,000 pounds produced by the new ocean shrimp fishery. Coastal crab landings were the largest since 1949, about 2,000,000 more than 1956. Olympia oyster production increased substantially the last three months of 1957.

Bottom fish landings amounted to 76,892,700 pounds, catches of petrale sole and true cod were greater than in 1956, but halibut landings were down.

Total catches of salmon were 44,647,200 pounds. The catch of pink salmon dropped greatly, with a total of 17,466,900 pounds landed in 1957, compared to a 1955 total of 31,675,200 pounds.

Salmon catches were held down a bit by an emergency closure instituted September 25, followed by curtailed season in October and November.

Puget Sound Opened to Herring Fishing

Four seiners landed 363,000 pounds of herring in Northern Puget Sound early in January and these catches brought the total for the season to 1,146,600 pounds.

The four seiners were the *Yankee Boy*, Capt. Robert Glenovich of Bellingham; the *Prosperity*, Capt. Gerald Holmstrom of Mount Vernon; the *Sea Breaker*, Capt. Boris Olich of Anacortes and the *Paradise*, Capt. Ed Smith of Bellingham.

This is the first year that Northern Puget Sound has been open to herring fishermen, although Canadians have been fishing just north of the border for years. The Washington season runs from October 1 to February 5, with a quota of 15,000 tons.

The director of the Washington State Department of Fisheries said that fishermen from this country should share in this harvest. The herring move through American waters and the state participates in their protection and regulation. Last year a total of only 261 tons were landed in Washington, while 40,000 tons were taken in British Columbia waters.

The Department of Fisheries of Washington is now co-operating with Canadian authorities so the existing annual quota will be shared by fishermen of the two countries without upsetting the balance between yield and spawning.

Rayonier Laboratory To Study Effects Of Pulp Wastes On Oysters

A \$70,000 laboratory that will cost \$80,000 a year to run is now in full operation near Hoodsport, Wash., studying the relationship of oysters and the pulp industry. Dr. Jerome E. Stein, who was assistant professor of oceanography at Texas A & M College and director of the Texas Marine Laboratory at Galveston, is the director of the new Rayonier Marine Laboratory.

The laboratory, established by Rayonier Inc., will be staffed by seven scientists and technicians who will work on several projects. The first of the problems will be study of oyster mortalities. A second program will study the waters of Puget Sound to isolate anything harmful or beneficial to oysters and other marine life.

The third will consider the effects of various concentrations of spent sulfite liquor on oysters and other inhabitants of the area. The programs have no time limit.



Capt. John Marincovich's "Cheryl Ann" of Everett, Wash., built in 1949 by Sagstad Shipyard, Seattle, from plans of Ed Monk. She is 57' x 16'4" x 7', accommodates 10 men, is 38 tons net, and carries 2400 gals. of fuel, with cruising range of 2000 miles. A General Motors 6-100 Diesel, with 3:1 reduction gear, gives a top speed of 10.3 knots, and she has Puritic Power Block operated by Vickers hydraulic system.

Separate Status Given To University Of Washington School of Fisheries

The School of Fisheries at the University of Washington was given status recently as an independent college of the University. Dr. Richard Van Cleave, a 1927 University fisheries graduate and director of the school since 1948, was appointed acting dean of the new college.

In receiving separate status, the College of Fisheries is being reinstated to the position it held in 1919, when it was first established. At the same time, the Board of Regents approved the integration of the Fisheries Research Institute into the College of Fisheries. The Institute will serve as a research arm of the college.

The University provides training for both biologists and technologists in fisheries. Situated near to both fresh and salt water, it is able to offer instruction in marine and fresh water fisheries management and technology. Courses offered lead to degrees in bachelor of science in fisheries, bachelor of science, master of science, and doctor of philosophy.

Cannery Firms Merge

Whitney & Co., Seattle have merged with Farwest Fishermen, Inc., Anacortes cannery firm which was leveled by fire last November. Included in the merger transaction is the Farwest Wrangell Co. of Wrangell, Alaska and Seldovia Packing Co. in Seldovia, Alaska. The official title will now be the Farwest Fisheries Division of Whitney & Co. Mel Halgren, manager for the past seven years will remain. Halgren states that debris is still being cleared from the fire and that there will be no pack made in 1958 until the plant can be rebuilt.

Seattle Fisheries Office Opens

Samuel J. Hutchinson, regional director of the Bureau of Commercial Fisheries, announced that the Bureau's new regional office at Seattle would open for business February 3, at 6116 Arcade Bldg.

The office will include the Bureau's Fisheries Loan Fund office which will move from Pier 42 and the Seattle administrative office of the Alaska Commercial Fisheries, which will move from the Post Office building.

GULF OF MEXICO

Alabama Boat Makes Record Snapper and Grouper Haul

The Star Fish and Oyster Company's snapper schooner *Lisa G.*, brought in the largest catch of snapper and grouper in the 58-year history of the Mobile, Ala. Company on January 27. The 44,000 pound catch is the largest single boat catch ever made in the Gulf of Mexico, company officials believe, and sets a new record. The previous record was set in 1946 by the schooner *Tom & Jean* with 40,000 pounds.

The large haul came off the coast of Mexico on a trip that lasted 20 days. The fish were located with a depth sounder and were taken from an estimated 300 feet of water. The fish ranged in size from one to 100 pounds.

The *Lisa G.* owned by Arthur, Victor and Richard Gonzales, owners of the Star Co., measures 78 feet and carries a crew of 11. Hand reels, fitted into slots in the rail, are used to haul in the fish. Sometimes three or four are brought up at a time. Captain Ted Leiser, who has been with the company for 24 years summed it up saying, "When we found the fish we started to work. When the fish moved, we moved."

Hydraulic Dredging And Planting Method Used For Alabama Oysters

Hydraulic dredging and planting are being used for the first time in Alabama. Sea food officials say the hydraulic process, used by the Department of Conservation's Sea Food Division to plant 36,000 barrels of seed oysters in state waters, is much faster and causes less damage to the oysters than tonging.

The oysters are dredged from areas where they can not be tonged profitably. They are loaded on a barge and towed to their new location. It takes about 12 hours to load the barge. E. N. Merriwether of Mobile has the contract to dredge the oysters and transport them to the various planting locations.

When the barge reaches the bed it is taken in tow by a conservation Dept. boat. As the boat tows the barge along a staked out area on a zig-zag course the oysters are washed overboard by two large hoses.

Perry Prescott, assistant director of conservation, says this method, all done under the supervision of sea foods division personnel, does not chip the oyster shells and distributes the seed evenly over the bottom. Among those supervising are Prescott, B. B. Larrimore, chief of the sea foods division, and sea foods biologist Don Luethy.

This is the first time oysters have been planted in Alabama waters at this time of year. Officials believe winter planting will result in a greater survival percentage. It is estimated that three to four barrels of oysters will be harvested next year for each barrel planted.

Conservation Dept. officials predicting good results for the program, feel that if it is carried out for five years it will put Alabama oysters ahead of all others.

Relief Dredging in Bon Secour River

Alabama Conservation Director W. H. Drinkard on January 17 promised that temporary relief dredging would be done in Bon Secour River in the near future.

John R. Nelson of Bon Secour Fisheries recently said at a meeting in Foley that shrimp boats are leaving Bon Secour since they cannot navigate the stream except at high tide because of a bar at the lower end of the channel and other obstructions farther up the river.



THE 73' SHRIMPERS "KATIE L", one of the first in Alabama to change to Texas rigging, is owned by Capt. Vito and Joe Lochirco, Gulf Shores. She has 275 hp. General Motors Diesel and 52 x 44" propeller, Surrette batteries, Northill anchor, RCA direction finder, and Hathaway winch.

Louisiana to Halt Taking of Undersize Shrimp

The enforcement division of the Louisiana Wildlife and Fisheries Commission is increasing its efforts to reduce the practice of the illegal taking of undersized shrimp, according to F. Lamar Clement, director. Clement stated that violations of this nature have become quite prevalent recently and every effort will be made to halt the practice. The measure is being taken to preserve and safeguard for the future, adequate supplies of this seafood commodity that means so much to the economy of the state.

Clement added that the present size limit of 68 to the pound as set by law did not appear to create any hardships on either the shrimpers or the industry and in view of this fact, he felt the law should be rigidly enforced.

Gulf Coast Oyster Reefs Affected By Reduced Fresh Water Flow

Mississippi's once-great oyster reefs are endangered by divergence of Mississippi River water from overflowing into Lake Borgne and thence over the expansive Mississippi and Louisiana oyster reefs in the Mississippi Sound.

Salt waters from the Gulf have taken over the brackish waters of the reefs thereby making them lush feeding grounds for the oyster-boring conchs. The conchs crawl in by the millions with the high saline content of the Gulf waters and devour the oysters. A lesser destroyer of oysters though still a formidable foe of the oysterman is the drumfish which grinds the oysters in its powerful jaws.

Throughout the late summer and fall a series of minor storms have kept the bottoms in constant turmoil and have covered many oyster beds with blankets of mud and silt. Many fine growths of young oysters have been choked off before they could be tonged or dredged. This has been true especially on the revitalized Biloxi tonging reefs maintained by the Mississippi Seafood Commission. This state agency plants shells on reefs and patrols these reefs to prevent unauthorized pirating of the bivalves.

The Commission hopes that the new Inter-coastal canal from the Mississippi River across Louisiana's southeast delta marshland will help in some measure to revive the great Mississippi and Louisiana oyster reefs. Despite the adverse circumstances of conch and storm, Mississippi is enjoying a good oyster season, better than in recent years, though not as good as in the days when Mississippi River waters spilled their life-giving fluids over the Mississippi oyster bottoms.

Texas Double Rig Shrimpers Need Only Regular License

Texas boat owners using two shrimp trawls will not be required to pay a double license, according to a recent ruling by Texas Attorney General Wilson. According to his opinion, the boat owner is obligated to pay but one license regardless of how many trawls a boat carries and operates.

The double-rig or Rockport rig, named for where it started a year ago, permits a trawler to effectively pull two trawls, one on either side of the boat, instead of a single larger net. The ruling specified that the shrimp trawl license is based on each boat operating or towing a trawl or trawls, and not the number of trawls that each carries.

Aransas Pass Shrimping Grows

The shrimping industry poured more than 8.4 million dollars into the local economy for the year 1957—exclusive of small shrimp used for other purposes valued at \$500,000. Commercial edible finfish were worth \$600,000, bringing the total for fishery products to 9.5 million dollars.

The increased revenue is credited in part to the large number of trawlers unloading at Aransas Pass. At least 140 boats used the harbor all year, and 160 foreign trawlers used the unloading facilities there during the peak production periods in the summer and fall.

The practice of using double rigging on shrimp trawlers has greatly increased the efficiency of shrimping operations. Starting in 1956 at Rockport, the double rigging equipment is used on at least 90 percent of all trawlers now unloading at Aransas Pass.

New Boatbuilding Firm at Aransas Pass

F. K. Lytle, well-known construction man of Sioux City, Iowa, recently purchased Gulf Coast Marine Ways at Aransas Pass from J. T. Stellman and W. J. Mott. Mr. Stellman will remain as general manager while continuing to operate his towing business and inshore and offshore crew boats.

Under the Lytle ownership, Intracoastal Marine Supply, Inc., a newly-organized company, will handle materials and supplies, and the Gulf Coast Marine Ways, Inc., will operate the boat building and repairing phases of the business. The company also will serve as headquarters for the twelve-trawler LYCO fleet, previously berthed at Casey Seafood on Conn Brown Harbor.

Texas Shrimpers Keep Coast Guard Busy

In 1954 there was a total of 1,170 Coast Guard assists for broken down or disabled vessels in the Gulf. Of that figure 396 were shrimp boats. In 1957 there were 1,830 assists with 690 of them being for shrimp boats.

The Coast Guard air detachment was sent to assist in locating or aiding 38 shrimp boats in distress in 1952. Last year the figure swelled to 173. As a result of the increase an ordnance man at the air detachment a year ago developed an air dropable pump to be used to aid sinking boats. The device has proved effective so far, and much speedier than a rescue vessel.

The Coast Guard cannot inspect shrimp boats for seaworthiness because of the way navigational and federal marine laws are written, but they are required to assist any and all boats in distress on navigable waters in their district.

Tringali Plant Closed Until Spring

Tringali, Inc. has closed its plant at Aransas Pass and transferred its winter activities to Tampa and Fort Myers, Fla., with the exception of two trawlers which will be kept in Aransas Pass until the plant reopens in May.

The firm located at Aransas Pass for the first time in



THE "HILDA M." 42' shrimper owned by R. D. Buffum, Sr. of Gulfport, Miss. She is equipped with General Motors Diesel, 2:1 Twin Disc reduction gear, 26 x 18 Columbian propeller, and Northill anchor.

1957 and built a plant on Conn Brown Harbor to provide unloading facilities for its fleet of more than thirty trawlers. Headed by S. T. Tringali, it was one of several Florida concerns which moved to Aransas Pass last year and swelled Texas shrimp landings to a record high.

Mississippi Firms Seek Oyster Import Aid

The De Jean Packing Company and the Marvar Shrimp and Oyster Company, Ltd. have appealed to their senators to help in bringing controls on Japanese canned oysters. Both Biloxi, Miss. firms say that their business is being hurt by the Japanese products. They want immediate action by Congress to help meet the increasing importation of shellfish from waters which do not meet minimum American health requirements and packed in plants below the standards imposed by U. S. Health Authorities.

"Oregon" Completes Caribbean Cruise

The *Oregon* returned to Pascagoula on December 7 completing a 7½ week exploratory fishing trip in the eastern Caribbean and along the northeast coast of South America.

Five 500-hook tuna longline sets were made and the highest catch rate was obtained off Bird Island where 111 yellowfin and one albacore were landed for a catch rate of 22.4 tuna per 100 hooks.

Large pink shrimp were taken in 23 to 75 fathoms over the entire range. A very large (4 to 8 count) scarlet red shrimp was caught in 300 to 400 fathoms off Surinam, at rates of 15 to 25 pounds per 3 hour tow.

Fisheries Training Classes In Abbeville

Free courses in fisheries training are now available in the Morgan City area through the Gulf Area Vocational-Technical School located in Abbeville, La.

Rep. E. J. Grizzaffi has been promoting this fisheries educational program, the purpose of which is to set up training programs for fishermen, free of cost, in this area. Classes in various phases of the fishing industry, such as navigation, radio communications, net repairing, boat operating and many others are offered in the program.

Finances to operate this extensive program are appropriated by the Government to states according to the size of the fishing industry in the respective states.

All vocational schools along the Gulf coast will be in a position to offer this training program. Each program will be tailored to meet the needs of the particular area.

The Gulf area school in Abbeville covers Vermilion and St. Mary Parishes, and will be in charge of Paul A. Bourgeois.

SOUTH ATLANTIC

Small Scale Planting Works For Maryland Oystermen

A small group of Shadyside, Md. watermen are trying to keep their traditional livelihood from dying. They, like their fathers before them, are tonging for oysters on the Anne Arundel county shore. But, these watermen are sowing what they reap.

Although private oyster farming is not the radical idea that it once was, general opinion holds that it has to be done on a large scale to be successful. Until now they have survived, contrary to predictions that failure would befall any waterman attempting such a project with meager capital.

"We took a gamble, especially for small operators like us," Ed Nieman, one of the group, said. They leased barren bottom in the west river and invested their savings in seed oysters and planted them over a few acres. Most of the men leased 25 to 30 acres of bottom. There is no natural rock there. Some of it is firm bottom and the rest is mud. Few have planted all their acreage.

Aside from the seed oysters being prey to many natural hazards during the three years in which they mature, money is the big problem to the men. Between 300 and 500 bushels of seed are needed to plant a single acre and seed costs them \$1.75 a bushel. In order to plant two acres with 500 bushels of seed each, \$2000 including costs is needed. Then there is the three year wait for the seed to mature.

Barring destruction by enemies of the oysters or storms the men can expect two or three bushels for each one he has planted. This can mean an earning of \$3000 to \$4000 plus the expense of harvesting. Bud Wilde, another of the group, figures that a farmer must plant at least four acres to make the effort worth while. That would mean tying up about \$6000 before he could realize a cent. After the initial three year period, each years harvest helps pay for the next years seed. Next year, after seven years of building, Wilde says, "I expect to make good money."

Together with eight other men, Nieman and Wilde have rented a vacant packing house and are shucking oysters and processing clams whenever they get direct orders for them.

Would Lease to Maryland Watermen On Much Larger Scale

Suggestions have been made in the past and are still being advanced against bitter opposition, to work out a program by which private leasing could be introduced into Maryland on a much larger scale without encroaching on public bars or cutting off the watermen's livelihood.

One out of four Maryland oyster packing houses have closed down in the past five years, and those still open are working well under capacity—even though many are packing Virginia oysters under Maryland brand names.

The packers explain their predicament this way: their supply of oysters has been falling off and the price they pay the watermen has remained firm.

Several of the State's largest companies buy oysters from Virginia or Delaware or have gone into partnership with Virginia to farm oysters in the waters of that state, where leasing is far more liberal.

Private leasing is restricted to only 12,000 acres of Maryland waters, but other states grow most of their oysters on rented bottom, with much higher yields per acre.

One suggestion would call for a program of aid to watermen who would be permitted to lease barren bottom and develop it with money loaned by the State. These

funds would come from the \$400,000 the Tidewater Fisheries Commission now spends on oyster rehabilitation.

Proponents of the plan declare that it would bring the State's economy far greater dividends than the same amount of money spent, as it is now, for the planting of shell and a little seed on the public bars.

The opposition, however, contends that it would in the long run squeeze out the small waterman and put the industry in the hands of "the big guy".

New Patrol Boat for Commission

The Tidewater Fisheries Commission is to have a new patrol boat—a speedy former Navy patrol boat which is being readied for use by the Commission in chasing down conservation law violators. The craft was obtained from the Navy's "mothball fleet" at no cost to the State.

The State, however, is required by the government to maintain the boat in a condition satisfactory to the Navy, and the Navy may recall the vessel in event of any emergency.

The Commission has three other boats under construction, which are scheduled for delivery to the enforcement fleet this summer. All are 40-ft. craft which will cost an estimated \$175,000.

The former Navy boat will be the largest member of the enforcement fleet and the fastest, with the exception of the *Potomac*.

Co-op Would Have Maryland Take Back Oyster Grounds

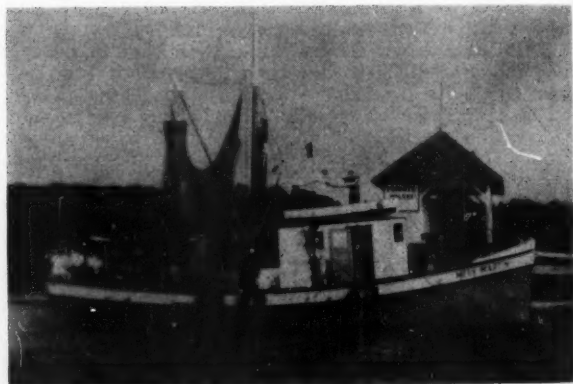
The Smith Island Cooperative which took up some 1800 acres of ground for private oyster growing several years ago, is now engaged in negotiations to turn the grounds back to the State of Maryland.

While the idea is not unanimous with the members of the co-op, the majority of the members are in favor of releasing their holdings, with a proviso. That proviso is that the Department of Tidewater Fisheries will, in taking back the land for the State, seed it with shells and seed oysters.

This season there has been little activity on the leased acreage. Just a few watermen have worked on the areas from time to time, and the catch of oysters has been small.

Should the proposition go through, it will mean an end to hand-scraping on the areas involved for the parts which co-op members may hold on to, and instead, the oysters would be caught with shaft tongs and patent tongs.

The area which the Co-op is expected to surrender is regarded as especially good for oyster culture. Should it be planted with shells and seed oysters in quantity, in a few years the yield of oysters there should substantially increase the overall production in the State, and be of great value to the economy of watermen in Somerset County.



The 48' x 17' x 6' "Miss Martin", owned by Capt. Tony Cross of Brunswick, Ga., and powered with D8800 Caterpillar Diesel which swings 38 x 30 five-bladed Columbian propeller.

Regional Fisheries Bureau Office Opened in Florida

The Bureau of Commercial Fisheries regional office in Florida was formally opened at St. Petersburg Beach on December 24 with Assistant Secretary of the Interior Ross L. Leffler present to make it official. The branch will direct the work of the Bureau in eleven South Atlantic and Gulf states, from North Carolina to Texas. Seton H. Thompson has been named regional director and Richard T. Whiteleather, assistant director.

Leffler told the group of officials and marine scientists attending the opening something of the plans of the new office, explaining that it is the first of four new regional branches to be established in fishing centers in the country.

Mr. Leffler pointed out that the commercial fisheries in Florida are growing at a more rapid rate than in any other place along the coast and that in the past decade fish production has more than doubled.

On the matter of research, he said that of particular interest is a new study of the pink shrimp fishery in the Tortugas area in which both the United States and Cuba have an interest.

Florida Requires Shrimp Landing Permits To Be on Boats

The Cabinet Board of Conservation at Tallahassee last month adopted a new regulation requiring shrimp boats operating in Florida to have their landing permits in their possession at all times. Director Ernest Mitts stated the purpose was to facilitate checks on shrimping activities.

A 1957 State law which became effective July 1 requires shrimp boats operating in Florida to obtain permits from the State Conservation Director. Some boats which were checked reported they had obtained permits but they were in other places at the time, and this created complications in enforcement work.

"George M. Bowers" Red Snapper Trapping

The *George M. Bowers* was scheduled to leave Miami on January 14 to go to the upper Gulf of Mexico and begin work on the use of traps for the commercial capture of red snapper. This work will be carried out over a period of several months.

The boat returned from a previous trip on December 30 which involved radar tracking of commercial shrimp trawlers operating on the Tortugas grounds, for the purpose of allowing accurate determination of trawling speeds.

Radar tracks were made of the courses of three vessels over varying periods of time. On most legs of these tracks, which were plotted at five or ten-minute intervals, speeds were determined to have been between 3.0 and 3.3 knots. The lowest speed observed for one ten-minute period, was 2.5 knots; the highest, 3.6 knots. All three vessels were employing the Texas double-trawl rig.

Coast Guard Given Emergency Pumps

Four \$1,000 gasoline pump kits for emergency use recently were presented to the Coast Guard station on Tampa Bay by the Tampa Shrimp Producers Assoc. General Manager Don McKee said the presentation was made in appreciation of the excellent work of the Coast Guard in helping the shrimp fleet in times of need.

The pumps are packed with buoys colored a bright orange paint that glows in the dark, the kit including a supply of gasoline, life preservers and other aids needed by vessels in trouble. The pumps and accessories weigh about 250 pounds each and can pump 6,000 gallons of water a minute. They float until picked up.



"PHIL ALICE", Harold and A. Earl Milliken's 54' shrimper powered by Caterpillar D326 126 hp. engine with Snow Nabstedt 3:1 reduction gear and 40 x 30" Columbian propeller, uses Esso fuel and lubricating oils. Columbian rope, Apelco radiotelephone, White compass, Danforth anchor, Wickwire wire rope, Linen Thread Gold Medal nets, Stroudsburg hoist are part of the equipment. The boat is finished with International paint, and operates out of Shallotte, N.C.

Currently between 175 and 200 shrimp trawlers are making Tampa their home port, and Coast Guard officers estimate that about a hundred shrimpers call on them for help each year.

"Little Charlie" Launched at Fort Myers

"Little Charlie", the third boat built by General Marine Boatyard Inc., Fort Myers Beach, was launched recently before a crowd of several hundred. The boat was christened by Nina Green, daughter of the owner Charles F. Green. The 63' shrimper is the third boat to join Green's fleet which operates out of Tringali Dock. *Little Charlie's* power is supplied by a D-342 Caterpillar engine. The other boats owned by Green are the *Marian* and the *Lochiel*.

North Carolina Fisheries Association Holds Annual Meeting

The annual meeting of the North Carolina Fisheries Association was held at New Bern on January 27. There were no principal speakers, but comments were given by Col. H. C. Rowland, Jr., district engineer of the Corps of Engineers. Retiring president Garland Fulcher gave the annual report of the work of the Association, as well as a preview of the work of the year ahead. Area and classification directors of the association were also called upon for comments and reports.

Hearing Scheduled on Fishing Proposals

The Commercial Fisheries Committee of the State Conservation and Development Board set a hearing for April 12 in Morehead City on two fishing proposals; one on the size of mesh in fishing nets in certain waters and one on Saturday shrimping.

The first proposal deals with a request from about 20 commercial fishermen from the Albemarle Sound area who asked that they be allowed to fish with three-inch mesh nets instead of one and a half-inch mesh in certain waters of the sound. The other proposal is a request of the N. C. Fisheries Association to prohibit shrimping on Saturday in state-controlled waters as a conservation measure.



Capt. Maurice L. Tarr uses his boat "Gene" for trolling and bottom fishing. The boat is 40' long and is powered with a 110 hp. General Motors Diesel turning a 20 x 20" Columbian propeller through 2.5:1 reduction gear. Included in the equipment are a White compass and Hudson American radio telephone. The Chincoteague, Va. boat is finished with Pettit paint.

Claim James River Dredging Would Not Harm Oysters

Plans have been underway for years to dredge a deep water channel up the James River to Richmond, Virginia to make an ocean port of the city. Not until recently has the project received wide support. Now, those in favor of such a project have acted for an enabling act to be introduced in the Virginia Legislature.

The James River has one of the finest and most extensive natural oyster seed beds in the world. Without the aid of man the oyster rocks produce 2,000,000 bushels of oysters a year. The harvest is the foundation of the oyster industry in Virginia and has an indirect bearing on the industry in Maryland, Delaware, and New Jersey. Approximately 75 percent of the oysters produced in Virginia come from the James River seed.

The deep water channel would pass directly between the oyster producing rocks. At present the river is fairly shallow and the oyster reefs rise up from the bottom. The currents and the tides which affect the oyster seem to concentrate the larvae on these rocks.

Together with the deposit of mud and silt, the greatest threat to the oyster beds is felt to be the change of currents around the bars. They would then carry the larvae farther away, where they would drop on mud and die or on to fresher water where the adverse conditions would kill them.

Engineers say that there is no danger to the oysters at all. They point out that it is possible to dredge and transport material to the spoil area without damaging the waters. They claim that the proposed channel misses the majority of producing rocks, which should eliminate any fear or complaint.

The leaders of the oyster industry do not want to stand in the way of Virginia's industrial progress, but they feel that the channel and oystering are incompatible. The two, they say, can not survive together equally well. They oppose the dredging of the channel with the claim that the James River seed area is too vital to endanger and Virginia should protect one of its most valuable resources.

Says Virginia Should Save Cushion Crabs

The crab situation in Virginia, according to Henry Owens of New Point, is more serious than he has even seen it before. Mr. Owens feels that the serious crab situation is the result of doing nothing to conserve the cushion crabs. If these mother crabs were not allowed to be caught and other conservation measures were adopted,

he feels the situation would clear up. Mr. Owens operates two crab dredge boats in the Chesapeake. Late last month one boat was able to catch about two barrels a day and once in a while as many as nine barrels a day. If this continues, Mr. Owens believes that crabbing should be discontinued altogether.

A thirty-barrel limit catch has recently been imposed upon all crab dredge boats in Virginia. Mr. Owens says that this limit should be lowered to 25 barrels to a dredge boat and that crab-potters should be limited to ten barrels until conditions return to normal.

Virginia Oyster Drills Show Decrease in Reproductivity

Reproductive activity of screwborers slumped amazingly during the summer of 1957, according to Dr. William J. Hargis, Jr., biologist at the Virginia Fisheries Laboratory, Gloucester Point. He feels certain that oyster planters will welcome such news.

During the year ending last June more than \$14,000 were spent for collected drills. These drills are studied carefully and last summer Dr. Hargis and Clyde L. MacKenzie, a graduate student, discovered that neither of the two kinds of drills living in eel-grass beds in front of the laboratory were laying as many eggs as they had during the previous summer. Whereas 330 young had been produced in each square yard of bottom sampled in 1956, only 41 were produced in 1957. About 80,000 drills had been removed from the area during the past several years, and the scientists are hopeful that this has caused the reduction in the breeding population.

Hargis and members of his research team worked in another area down river similar to the bottom where they had been trapping screwborers in 1956. Although the new plot, never disturbed before, had three times as many large drills on it as the first plot fished in 1956, it, too, produced only 42 baby drills per square yard last summer.

Private Oyster Grounds Big Producers

For every bushel of oysters produced on natural rocks in Virginia, five bushels are produced on rented grounds, according to Robert S. Bailey of the Virginia Fisheries Laboratory, Gloucester Point. Less than a million bushels of market oysters were tonged from public rocks in 1955 while more than four million bushels were dredged and tonged from private grounds.

At the present time the State rents more than 128,000 acres to Virginia planters. By contrast, the smaller yield from public rocks comes from more than 200,000 acres of natural rock.

While private grounds have increased on a large scale, areas producing seed oysters have not been extended proportionately. Parts of the Corrotoman and Piantatank Rivers could be developed for raising seed, and some private oystermen may produce seed on their own grounds, according to Dr. J. D. Andrews and Dexter Haven, oyster biologists at the Laboratory.

Good Yield of South Carolina Oysters

The yield of oyster meats per bushel in South Carolina waters continued good during December and the Northern section which had not produced oysters to any extent before, produced about 5,000 bushels of large shell oysters.

The season for shrimping closed December 15. Species taken were all white and the greater part of the landings counted 80 to 100 per pound, heads off. There were more out-of-state shrimp trawlers fishing in South Carolina this season than ever before.

Hard crab production was about normal and some hard crabs were exported to North Carolina.

Finfish activity for the month of December was very slow in all sections of the State. Some flounder and spotted trout were taken in the Northern section and before the shrimping season closed, some spot, croaker and whiting were also landed.

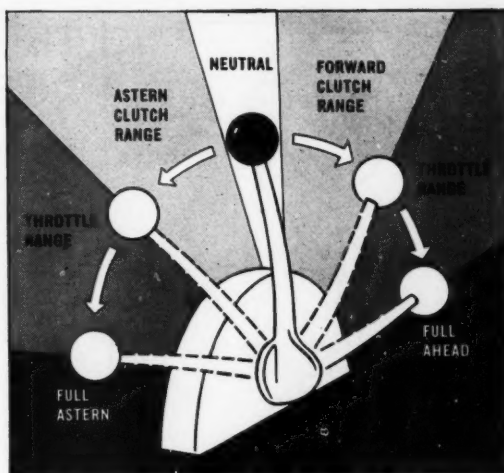
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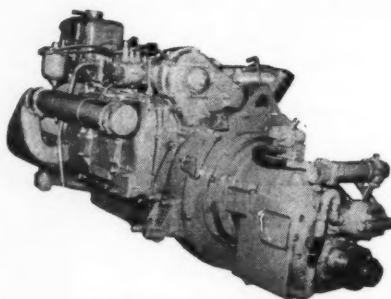
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The Lookout

(Continued from page 5)

streams and efforts provide the renewal of the species.

Action of a definite and positive nature attempting, through international law, to adjust the wide differences in opinions of men exploiting the world fisheries, may result in curing one situation while at the same time creating another.

Such was the case with the Bristol Bay red salmon. The International North Pacific Fisheries Convention was unique in that the signatories agreed, under certain conditions, to abstain from fishing specified stocks of fish in specified areas. This introduced a new principle of international conservation. Other nations should not enter and fish where another nation has developed and conserved a high seas fishery and is fishing it at a maximum rate. In return, the fishing nation must continue its conservation program.

An attempt had been made to secure the interests and welfare of each of the contracting parties. In doing so, the matter of conservation and historic utilization of available stocks was placed above other interests.

However, when final preparations of the treaty were made, an important factor was overlooked—the nat-

ural law governing the creation, migration, and reproduction of salmon. There is no way to determine, when fishing on the high seas, the rivers for which the fish are headed, to complete their cycle.

Shortly after the convention became effective, Japan began constructing a huge fleet to exploit the North Pacific salmon fisheries. Then, with the rapid increase of the salmon take by Japan, a sharp decline in United States landings was noted along the entire Pacific Coast of North America. Conservation was made impossible by extensive fishing of the high seas.

No program can provide all that is wished for, unless individual agreements are worked out by nations of common interest to strengthen, further, the relations between fisheries nations.

An overall internationally recognized authority for reviewing problems and matters of dispute might provide a just means towards balanced fisheries. The commission, representing all nations, could help in the adoption of a general program. Under the agreement, individual nations would work together on problems of common interest. The membership of such an organization should include men of actual fisheries experience or those recognized for their accomplishments in fishing interests.

GREAT LAKES

Ohio Association Meeting Seeks Better Marketing

At a two-day session in Cleveland on January 13 and 14 the Ohio Commercial Fishermen's Association conferred with Federal and State fishery experts on a variety of problems for which solutions must be found.

Among those problems are fish gluts that occur in a 60-day Spring season when more than 50 percent of the annual catch is taken.

Other problems discussed were the processing, storing and marketing of fish over a long period of time; the possibility of a filleting machine which would be suitable for small varieties of fresh water fish; how to market pickerel in April shortly after the close of the Lenten season; how to compete with cheaper labor costs in Ontario and more efficiently used gear on the Canadian side; how to make profitable use of fish waste; and how to improve general marketing practices.

On of the speakers at the Meeting was Congressman A. D. Baumhart of Ohio. Charlie Jackson and Dean Mellich of the National Fisheries Institute also spoke.

Donald McKernan, Director of the Bureau of Commercial Fisheries was present with most of his Lake area staff. John C. Pelton, Associate Supervisor of the Fish Management Section, Ohio Division of Wildlife, and other members of the Ohio State Government actively participated.

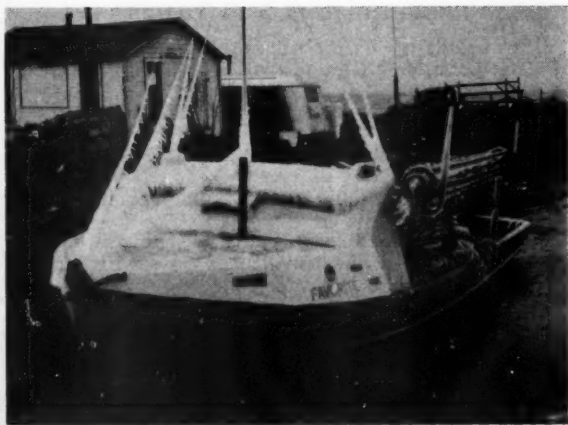
Ray Full, Kishman Fish Co., Vermilion was elected president of the Association, succeeding Nelson Parsons. Mr. Full is also chairman of N.F.I.'s Lake and Rivers Fish Committee.

Fishermen Enjoying Good Smelt Season

In the Great Lakes northern areas commercial ice fishermen were getting good takes of smelt last month. While the fish were paying off best in the jumbo sizes, the major portion of the hauls were in smaller sizes most of which are being sold to cat food processors and mink ranchers.

In the Bayfield, Wis. area of Lake Superior and in the Chassell, Mich. district hundreds of smelt netters were out with nets to produce lake smelt which are gathering in the bays to satisfy their annual spawning urge.

In the Bays de Noc area of Green Bay of Lake Michigan about 1,000 fishermen were braving the frigid weather last



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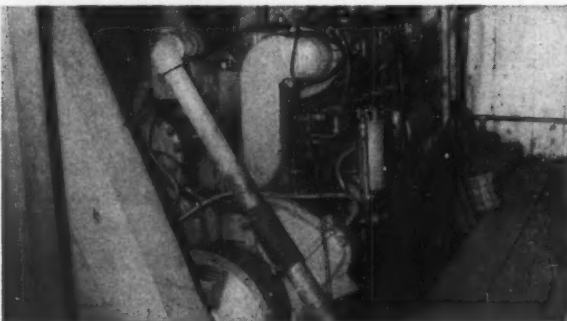


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month to net for the lake smelt which gather in the bays by the millions at this time of year.

While herring production in the Green Bay area and northern Lake Michigan has been moderately good, weather has hampered good production of lake chubs. There is a good abundance of chub in Lake Michigan and good commercial quantities can be taken, but among the catches are so many chub of smaller size that producers face a marketing problem in this species.

On Lake Huron, primarily on Saginaw Bay, good commercial quantities of small smelt were being taken along with chub in the smaller sizes. Larger mesh nets were taking some larger chub and herring, but catches were running only fair.

Ice fishing on Lake Erie was starting to gain impetus late last month. On this lake, however wintery winds are difficult to face because there is little around the lake to break the sweeping winds that sometimes upset ice-fishing operations. The hazard of the ice breaking up into ice floes is dangerous, and only under suitable weather conditions will a fish producer venture out far on Lake Erie during the ice season.

Booklet Stresses Value of Carp

Pointing out that Wisconsin carp are sold in New York City markets at from 10 to 18¢ a pound, in successful competition with ocean fish, the agricultural extension division of the University of Wisconsin has issued a leaflet listing 12 ways to cook carp.

The leaflet says that in food value carp compares favorably with other fish which are important sources of tissue building food, and that carp may, therefore, be used to a large extent to take the place of meat in the diet.

The leaflet, issued under the direction of the State Council of Defense, points out that there is little appreciation of carp as a food in Wisconsin, despite the fact that large numbers are taken each year by state crews and commercial fishermen.

Inland Lake Trawling

Trawling has definite commercial possibilities on inland lakes, according to Thomas Wirth, a Wisconsin fish biologist. The use of trawls has been studied on Wisconsin's huge Lake Winnabago since 1952, and they were put to use by commercial fishermen in 1956.

They are used to take sheepshead, present in the lake in large quantities, and Wirth praised the selectivity of the method. He said that by using a large mesh trawl, very few game fish per tow were recorded.

Specie selectivity, however, depends much on the height the cork lines ride above the bottom. Trawls with high riding cork lines take as many as seven times more game fish, without an increase in the sheepshead catch.

Studying Pollution and Fish Tastes

A joint study on the effect of various kinds and degrees of water pollution on the taste of fish is being conducted by the Wisconsin Conservation Department, the State Committee on Water Pollution and the University of Wisconsin.

Federal funds have been made available for the study and will be used by the university in its test of fish flesh. Samples of fish will be prepared and submitted to a taste panel.

The Conservation Department will take fish samples from a variety of waters four times a year for analysis by university scientists and for taste tests.

Fishermen Busy Repairing Nets

Harvey Floro, owner of the Ohio Fish Co. of Conneaut, Ohio, reports that while all fishermen are busy this winter in repairing nets, the much-publicized damage incurred in last fall's storms was not unusual.

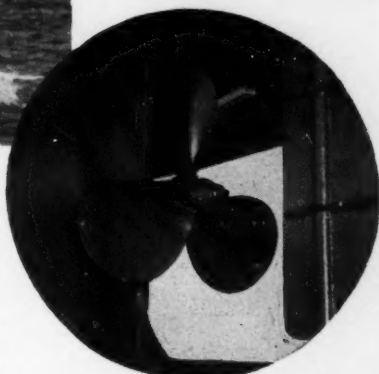
Damages amounted to several thousand dollars, but for three consecutive years local fishermen have had similar losses.

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New Method To Control Oyster Enemies

RECENT reversals in the oyster production of New England and New York have been due primarily to successive years of poor sets. The situation has become such that it is necessary to employ all means to save and bring to marketable size as many oysters as possible.

In the past the industry has been offered several methods of controlling shellfish enemies, including starfish and barnacles. More recently methods of chemical control undesirable species of crabs which are great destroyers of small clams and oysters. These methods are in use in this country and abroad. A mechanical method of destroying oyster drills, by burying them under a thin layer of bottom deposit, was found to be extremely effective under experimental conditions and was offered to the industry to be tried under field conditions.

Still, development of further effective and versatile methods of protecting commercial species of shellfish are needed. Screening of chemical compounds to find one would be useful in controlling oyster pests was one approach to the problem. In the beginning, it was thought that the boring sponges would be the first to succumb to chemical attack, because of their structure and anatomical characters. But, after trying approximately 2000 different chemicals, mostly of organic nature, no compound that would kill sponges without seriously endangering oysters could be found.

Recently, Dr. V. L. Loosanoff and L. W. Shearer of the Bureau of Commercial Fisheries, Milford, Conn. Fish and Wildlife Service, developed a method which has proved effective and extremely promising in the control of several other oyster enemies and competitors. The method consists simply of immersing sponge-infected oysters or

cultch, in which enemies are found, in a saturated salt solution and then keeping the treated material in the air for some time before returning it to sea water.

Sponges and other enemies can be killed in several ways in this method. Destruction can be accomplished by dipping them in a saturated salt solution for comparatively long periods and then returning them immediately to sea water, or by dipping the materials for only a brief period and leaving it on deck for some time before planting it overboard. During this period of remaining on deck the salt will continue to exert its effect on the unprotected tissue of the oyster enemies, causing further harm. The latter means will probably be the most convenient method for oyster farmers in their ground cleaning or transplanting operations because they normally leave the dredged material on deck for several hours before returning it to the sea water.

Another way to combat the enemies is to spray the dredge-loads of oysters, cultch or different types of spat collectors with a saturated solution salt. However this method is less effective than total immersion because only one side of the oysters' shells is covered by the spray.

Experiments indicate that the oysters will not suffer ill effects and mortality from the salt treatment if their shells are not so damaged by handling. If strong salt solution can gain access through injuries, it can hurt the soft oyster bodies. Healthy oysters were subjected to a saturated salt solution at a temperature of about 20 degrees centigrade for thirty minutes, yet suffered no ill effects. Longer exposures however, killed some of the oysters. Some other forms such as small hard clams, may be effected by continuous exposures of only 15 minutes.

Since it is easy to dilute a strong solution to a level where it will become too weak to be effective, it should be standard practice to keep crystals of undissolved salt on the bottom of the vats in which the cultch and sponge-infested oysters are dipped. The crystals will indicate that the solution remains saturated.

NORTH HILL

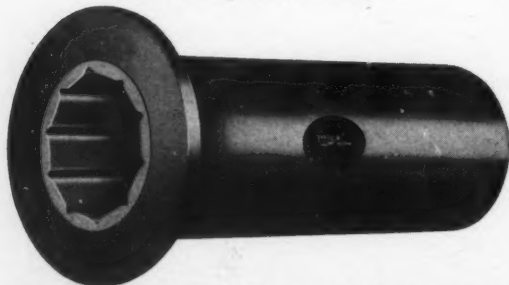
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Score Sheet For Checking Fish Handling On Boats

IN order to evaluate the progress of the quality improvement program initiated for fishing boats a year ago, the Bureau of Commercial Fisheries has provided a new score sheet. Rules and standard procedures aboard New England trawlers were introduced in January, 1957, for quality improvement of fresh fish. Used on a voluntary basis, the procedures were developed by the Technology Division of the National Fisheries Institute under terms of its contract with the U. S. Bureau of Commercial Fisheries. The contract is financed by funds provided by the Saltonstall-Kennedy Act.

Quality guides for trawlers were printed for posting on all trawlers. In order to evaluate the results of the initial distribution and posting, a "Score Sheet for Self Evaluation—New England Trawlers" (#2) has been developed for New England trawlers to check themselves on the many factors that contribute to the quality of fresh fish.

The score sheets were designed for private evaluation but the written results can be valuable as a basis for discussions with crews, mates, sea captains, and shore captains.

Twenty statements are listed by which operations can be evaluated. Score points, based on the degree of adherence to the suggested procedures are assigned according to the following schedule: Always—5, Usually—4, Often—3, Occasionally—2, Seldom—1, Never—0. The sum of the acquired points indicates how well the operations are following the accepted "Rules and Standard Procedures." A score of 100 is possible. The statements are as follows.

- Fish are gutted thoroughly, leaving no part of the gut (livers etc.) to start spoilage.
- All sizable fish (over 2 lbs) are gilled, winter and summer.
- Gutted fish are washed thoroughly.
- Water in washing box is changed frequently.
- Fish are put down out of the weather quickly.
- Fish coming out of the hold are sorted with care to cut down on number of dock culls.
- Ice bed in pen is at least six inches thick.
- Jagged edges in crushed ice are pounded out and made smooth, (bottom fish carry the weight).
- At least three inches so space is left between fish, pen boards and hull.
- All layers of fish in pens are gauged to the size of the variety so that all fish get the benefit of ice.
- Fish are shelved in order to relieve damaging pressure on the bottom fish.
- Plenty of ice is used at all times. (This protects against breakdowns, bad weather and accidents or sickness.)
- The hold and pen boards are dried out and painted thoroughly at least once a year.
- The hold is washed completely and scrubbed after the discharge of each trip and bactericide is sprayed or hosed on the cleaned surfaces.
- Pen boards are washed and scrubbed immediately after they come out of the hold.
- Worn or beat up pen boards are replaced with new ones.
- Working tools, which come in contact with fish, are kept clean and free of rust.
- Culls are handled quickly when discharging trip.
- Culls are not thrown on the deck but placed immediately in an iced container on the dock.
- Facilities for personal cleanliness are provided and used.

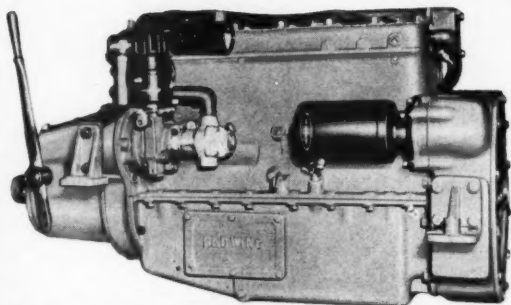
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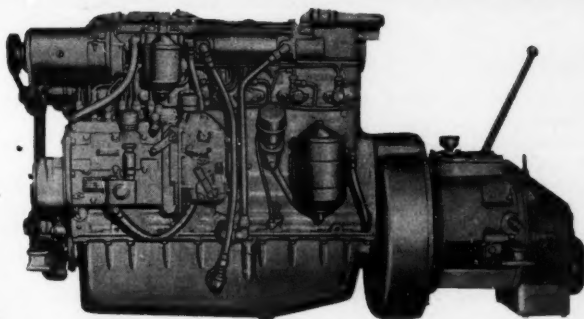
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PORTLAND, MAINE

Abalone Transplanting

(Continued from page 10)

In areas where abalone are being harvested by the divers, the growth rate is more rapid than in those areas where the abalone are left more or less undisturbed. Whether harvesting the abalone and removing the surplus animals is the deciding factor, or whether growing conditions are superior in these areas, is a moot question. More information is needed on the subject.

History of California Fishery

Until the Chinese came to California during the gold rush days, the local Indians were the only ones to utilize the abalone to any extent; these people had been using the meat for food and the shell for ornaments, fish hooks, and money, since pre-Columbian times. The descendants of the Spaniards and the immigrants from the United States did not use the abalone, presumably because of the plentiful supply of other foods. The Chinese, however, were happy to find this mollusk which they knew from their homeland as a great delicacy.

The Chinese at first gathered abalone only for their own consumption, but in 1864 they began to dry the meat and ship it to the Orient. The Chinese collected only from the rocks that could be reached at low tide, and soon over-exploited this rather limited area. The various seaboard counties soon began imposing legal restrictions.

About 1900, after the gathering of abalone on shore was no longer profitable, the Japanese came into the industry, introduced the diving suit, and the fishery moved into deep water. The Japanese divers worked out of Monterey from Pacific Grove south to San Simeon. Nearly all operations were carried on between Pt. Lobos in Monterey County and Picos Creek in San Luis Obispo County, the abalone being landed at Monterey. In 1929 the area from Picos Creek to Pt. Buchon was opened, and a number of Caucasian divers started operating out of Morro Bay. The center of the industry gradually shifted

to this more southern port and to this more southern fishing area, which extends roughly from Cayucos (Morro Bay) to a few miles above San Simeon, a distance of approximately 30 miles.

This area has been in continuous production since 1929 and is the source of the majority of the red abalone landed in California today. Red abalone produced in this area are of the highest quality and demand a higher price than the pinks, which come from southern California.

Few Abalone Landed During War

During the first years of World War II, few abalone were landed. The Japanese were forbidden to dive and the other divers were aiding the war effort by working in southern California gathering the marine algae from which agar-agar is manufactured. Prior to the war 90% of our agar had been imported from Japan, and it was necessary to develop a local supply of this product which is used extensively in bacteriological work.

At this time (1943), the north coastal area from Mendocino County to Pigeon Point, San Mateo County, was opened to commercial diving. It is not generally known but most of the north coast was open to commercial diving from 1909 to 1937 and again from 1943 through 1945.

Among the difficulties encountered by the few commercial divers attempting to operate along the North Coast, not the least was the attitude of some of the local residents. In the 1920's a group of citizens loaded an old brass cannon that was on the bluff overlooking Mendocino Bay and fired at the abalone boats that were at anchor. The boats left and did not return. Again, during World War II, abalone boats attempting to work along the Marin County coast were fired on.

This opposition, combined with the characteristic rough weather and rugged bottom of the northern California coast, has tended to restrict the numbers of divers attempting to work in this area. As a result, only a very small amount of abalone was taken from this area during the periods when commercial abalone fishing was permitted in Northern California.

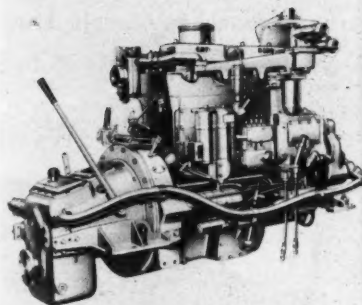
EQUIPMENT and SUPPLY NEWS

Caterpillar D339 For Marine Use

The Caterpillar D339 engine has been made available for marine applications according to Caterpillar Tractor Co., Peoria, Ill. The D339 is a 4-cycle, 4-cylinder, naturally aspirated engine with a 5¼" bore x 8" stroke.

Rated at 100 hp. at 1200 rpm. for continuous operation, the new power unit is equipped with Twin Disc MG165 reverse and reduction gear. Reduction ratios of 1.96:1, and 3:1 and 4.4:1 are available. Additional equipment includes water-cooled manifolds, expansion tank, marine type air silencer and SAE marine standard tachometer drive.

Caterpillar D339 marine Diesel has a rating of 100 hp. at 1200 rpm.



Ross Re-designs Heat Exchangers

Ross Heat Exchanger Division of American Standard, Buffalo, N.Y. announces an expanded line of type BCF exchangers, designed for cooling lube oil, jacket water, hydraulic and other fluids, with new materials and new design features.

The 1958 BCF is offered in 46 sizes; one, two and four pass designs; and 1.2 to 124 square feet of heat transfer surface. Changes include baffle structure with flanged lip at each tube hole and on outer edge for tighter fit, stamped steel feet movable for easy mounting, hubs relieved under connections for unrestricted flow, copper alloy core assembly and cast iron bonnets.

Complete information can be obtained by requesting Bulletin 1.1K6 from Ross Heat Exchanger Division of American-Standard.

New LaMarche Marine Battery Switch

A new marine electric remote-controlled battery switch is being offered to boatowners by the LaMarche Sales Company of Wakefield, Rhode Island. The "Sea-Safe" switch is designed for operation from helm positions on the main bridge and flying bridge.

Remote-control panels features an indicator light with light switch to show whether the battery switch is open or closed. Also featured are separate push buttons for opening and closing the switch, and a key lock to make the switch inoperable. The switch draws no current from the battery either open or closed. Only momentary actuating current is used.

Rated at 1200 amperes momentary and 600 amperes continuous duty, the Sea-Safe switch allows the boatowner to completely cut off all battery current from engine starters and electrical system when fueling or leaving the boat unattended. The switches are available for 6, 12, 24, 30 and 32 volt battery systems.



Air-cooled AiResearch turbocharger T-7 designed for small Diesel engines.

Impregnated Clothing From Jomac

Originally developed by James North & Sons, Ltd., of England, North PVC products are now being introduced and manufactured in the United States By Jomac-North, exclusively for Jomac Inc., Philadelphia, 38, Pa. Head-to-toe protection from rain, hail, sleet and snow is offered by this line of protective outerwear.

They are made from a basic fabric impregnated on both sides with North PVC for protection. The seams are stitched with synthetic thread, then shielded and sealed by electronic welding. The lightweight, abrasion resistant line of clothing includes three basic garments: a full length coat, overalls, and a short coat worn with the overalls.

Metallic Coatings New Suspension System

Metallic Coatings Corporation, 919 North Michigan Avenue, Chicago, Illinois announces a method for holding the heavy loading of copper powder in suspension in Coeroyd and Coperit anti-fouling bottom coatings. The new method is used to prevent hard caking on the bottom of the can during long periods of standing. Easy stirring and more thorough mixing are also possible.

The manufacturer states that the product is not changed otherwise. It has the same heavy loading of copper powder, the same long lasting anti-fouling qualities and no increase in price.

Allied Diesel is Lathrop Distributor

Allied Diesel Sales & Service Inc., 332 Congress St., Boston, has been appointed distributor of B & W-Lathrop marine gasoline engines, manufactured by Lathrop Engine Division, Burmeister & Wain American Corp., Mystic, Conn. The B & W-Lathrop line includes 30, 60, 130 and 155 hp. models.

Small Diesel Turbocharger By AiResearch

Diesel engines in the 80-130 hp. class, naturally aspirated, can be boosted into the power range of engines twice their weight with the latest model AiResearch turbo-charger. Developed by Garrett Corporation's AiResearch Industrial Division, Los Angeles, Cal., the T-7 turbo-charging unit is designed for small Diesel engines.

The T-7 weighs 24 pounds, and measures 8½" in length and diameter. It is capable of feeding 15 to 30 pounds of air per minute into Diesel engine cylinders under normal conditions. Air-cooled, AiResearch turbochargers effect such benefits as low specific fuel consumption, cool operating and clean burning engine, less noise and almost complete elimination of exhaust smoke.

New Edson Steerer

The Edson Corporation, 334 South Water St., New Bedford, Massachusetts, has introduced a new Geared Reduction Sprocket Steerer for high powered craft from 35 to 120 feet. The heavy duty steerer is of all bronze, non-magnetic construction. It has lubricated-for-life bearings and is supplied with 4 feet of bronze roller chain. The steerer is adapted for automatic pilot operation by a 4" shaft extension.

Made in four sizes the Edson steerer can be inverted to conform to space limitations. A mechanical rudder indicator with large easily read dial is optional with all models.

Air Starting Motor Bulletin

Ingersoll-Rand Company has put out a new 20 page bulletin describing its line of air starting motors for starting Diesel, gasoline and natural gas engines. The bulletin contains detailed specifications and mounting dimensions on 34 models in the company's line.

Five hundred engines by 25 engine manufacturers are listed, with proper air starting motor shown for each engine. Instructions are included for selecting the correct air starting motors for unlisted engines.

A copy of the bulletin, Form 5094D, may be obtained from Ingersoll-Rand air starting motor distributors or from Ingersoll-Rand Co., 11 Broadway, New York 4, N.Y.

Northeastern Handling Universal Engines

Universal Motor Co., Oshkosh, Wisc. has appointed Northeastern Distributors, Inc. of Cambridge, Mass. as Universal central distributors for New England. They will maintain complete and active stocks of Universal marine engines, electric plants, and parts. The Universal line will be handled through their marine department, which is under the direction of W. L. Jackson.

Rocket Chemical Has Anti-Rust Compound

Rocket Chemical Co., Inc., 4674 Alvarado Canyon Road, San Diego, 20, Cal. has an anti-rust compound called WD-40. Tests on a San Diego tuna boat showed that it removed and sealed off moisture, softened and flaked off rust and scale and protected metal surfaces. WD-40 displaces moisture and removes it from hard inaccessible areas. It dissolves salt crystals and corrosion drawn inside from moist and salt contained atmosphere.

WD-40 is not harmful to metals, plastics, etc. and comes in a spray container. It is also available in bulk containers of 1-gallon, 5-gallon, and 55 gallon capacities.

New Ship Heater Added To Way-Wolff Line

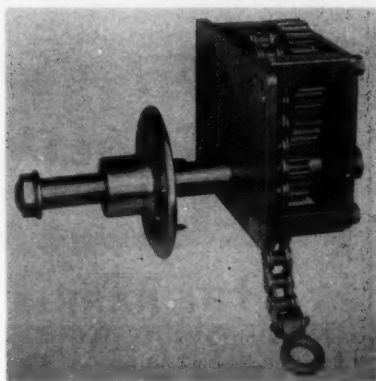
Way-Wolff Associates, 33 Fulton St., New York 38, N.Y. has produced a special model of the 917-6C Way-Wolff Ship-Heater for heating boats from 40 to 80 feet in length. The unit has a stainless steel or chromium plated jacket, brass chrome plated fastenings and fittings including gauges and flexible metallic conduit.

The unit comes wired with U. S. Navy approved type marine waterproof flexible conduit with filters meeting Navy requirements for radar and radio interference free shielding. It can be installed in either vertical or horizontal position.

The 917-6C heater has automatic Diesel oil burner, marine controls, and insulating cabinet. Accessories such as tank and heater combinations, panel-vectors designed for hot water or steam heat aboard ship are available.

The panel vectors are of a recently developed marine design. Practically indestructible and offering little resistance to steam or water flow, they have a pleasing appearance and can be recessed or located below seats if desired.

New Edson Geared Reduction Sprocket Steerer is adaptable for automatic pilot operation.



Griffith Has Wet Muffler

A small, lightweight, non-metallic muffler developed by Griffith Rubber Mills of Portland, Oregon absorbs engine detonations and reduces exhaust roar. It is a vulcanized unit molded of a rubber compound made impervious to the action of salt spray, oils or acids generated in the exhaust gases of internal combustion motors.

Flexible baffles automatically control back pressure. Salt air, water or moisture cannot readily flow back through the baffles to the motor. Available for inboard gasoline marine motors up to 150 hp. and Diesel motors up to 60 hp., the unit can be installed either horizontally or vertically. Measuring 14½" in length and 6" in diameter, it weighs 4½ pounds and clamps into exhaust lines up to 3" in diameter.

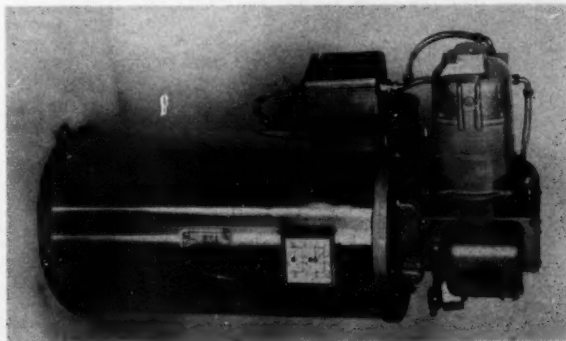
Hunter Machine Handling Waukesha

Hunter Machine Co., operated by Roy, Hunter of Rockland, Me., has been appointed dealer for Waukesha marine Diesels and Snow-Nabstedt reverse and reduction gears by Hathaway Machinery Co. of Fairhaven.

Catalog on Norseman Line

A brochure is also offered by Norseman Marine describing the Outboard Z-Drive engine recently added to its line of marine engines. The Z-Drive unit combines a four-cycle 70 hp. inboard engine with a retractable outboard drive. Specifications of the engine and outboard drive are included in the brochure as well as dimensional drawings of the unit.

Norseman Marine, 111 Nevada Street, Oshkosh, Wisc. now has available a new 20 page catalog covering its line of marine engines. The catalog illustrates the complete Norseman line and includes a series of illustrations showing typical marine engine installations. Also included are dimensional drawings and specifications Norseman Knight, Tarpon, Bluefin, Bullet and Arrow, six cylinder models and the Colt and Elf, four cylinder models, as well as complete details on the latest V-drive models.



Way-Wolff Model 917-6C Ship Heater.

New 93-Foot Scallop

"GERALDINE"

Equipped By

THE HARRIS CO.

with **RCA**
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and **RADAR**



Hallicrafters Receivers
and **Lorans**



BENDIX
AUTOMATIC
PILOT
and **DEPTH**
RECORDER

We furnished and installed all the Electronic Equipment on the "Geraldine" which is owned by Joseph Perry of New Bedford.

We also supplied many other items of equipment and marine hardware, including

SURRETTE BATTERIES — WALL ROPE

Perko Running Lights, Rapidayton Fresh Water Pump, Galley Sink, Port Lights, Fog Bell, Bow Chalks, Wire Rope

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Specializing in Fishing Boat Supplies

Marine Hardware — Dragging Equipment
Electronics — Fuel — Groceries

New Woods Hole Laboratory To Be Constructed

According to the Bureau of Commercial Fisheries Biological laboratory at Woods Hole, Mass. contract for the construction of a new building has been awarded. The new building will replace the present laboratory which was made 70 years ago. It will be a three story, fire proof structure of brick and masonry.

Congress has appropriated \$930,000 for the complete reconstruction of the Woods Hole installation. Future plans include a flexible arrangement of plumbing to provide sea water under controlled conditions of temperature and ionization so that the natural water conditions of the North Atlantic can be duplicated in the laboratory. The estimated cost of the building complete with equipment is \$570,000.

A second unit to be constructed at a later time will include an aquarium which would be used for public educational and scientific purposes.

The Woods Hole laboratory is the focal point for the biological study of the commercial fish of the Northwest Atlantic. The work of the laboratory has assumed increased importance in the implementation of the work of the International Commission for the Northwest Atlantic Fisheries. Among future research projects are the studies of the difficulties of survival faced by young fish, chemical and biological aspects of sea water, continuation of net studies, microbiological work, migration and spawning studies and others on the various species of commercially important fishes in the New England Fisheries.

During the period of construction at the laboratory, research programs are being conducted from temporary quarters near Falmouth, Mass.

Scallop "Geraldine"

(Continued from page 11)

carry 1000 gallons of fresh water. The captain's quarters are aft of the pilot house and provide all conveniences.

There are two welded steel tanks either side of the main engine, with total capacity of 5500 gallons. The auxiliary power unit is a "Deseco" model with 2 cylinder, type FR-2 Lister Diesel, 10 kw., 125-volt, 1800 rpm. Kurz & Root generator, Quincy air compressor and Marine Products pump.

Other pumps include a 2½" Edson hand deck model, and two Viking pumps—one driven off the main engine and the other operated by a 2 hp. motor. There is a 10 kw. Kurz & Root generator driven by the main engine, and the vessel is heated by a Shipmate hot water boiler, located in the engine room. The boat is fueled and lubricated with Socony Mobil products.

The Harris Company of Portland, Me. furnished all of the electronic equipment for the new scallop. Her full complement of navigating instruments includes Model 155 Bendix automatic steerer, Bendix DR-12 depth recorder, RCA Radiomarine Model CR-105B radar, RCA Radiomarine Model 8060, 150-watt radiotelephone, and two lorans. She has Hallicrafters radio receivers in the captain's stateroom and fo'c's'le, and a White 7" Constellation compass.

Harris also supplied the boat with Surrette 8HHG-21, 112-volt batteries, Wall rope, Rapidayton fresh water pump, 8" bronze fog bell, 15" galvanized bow chalks, trawling wire, galley sink, Perko bronze port lights for the deckhouse and Perko running lights.

Deck gear on the *Geraldine* is of Hathaway manufacture, and consists of a Model 653 winch with 22" drums, 5" gallowes frames, and a 5 hp. electric fish hoist. Life saving equipment comprises two Pottle dories, two Atlantic & Pacific 10-person, balsa life rafts, two 30" life rings and life jackets. The boat carries a 200 lb. Danforth anchor and has Paulsen-Webber wire rigging. She is fitted with a Carlisle & Finch 12" searchlight and a Kahlenberg Commander model air horn.

Andrea
Austin
Carol-
Clipp
Cushm
Edith I
Evelina

Barbar
Beatric

Bette A
Carl J.
Carol &
Carolyn
Connie
Fairwe
Irene &
Jane D
Lt. Tho

Agatha
Arling
Atlanti

Baby R
Bay (2)
Bonave
Bonnie
Bonnie
Bright
Buzz &

Cambr
Caracal
Carmen
Ciarlot
Charlot
Colum
Comet
Curlew

Dolphin
Doris F

Eagle (E
Elizabe
Emily R
Ethelen
Flying
Four (3

Gerald

Hazel E
Holy Fa

Ida & J

Jane B.
J. B. Ju
J.B.N. (C
Jeanne
Joseph
Joseph

Lady of

Manuel
Maria C
Mary A
Mary &

Adele K
Arnold
Bernice
Carole
Famigli
Gertrud
Lynn (3
Madelin

Babe Se

FEBRU

BOAT CATCHES

For Month of January

Hailing fares. Figure after name indicates number of trips.

NEW YORK

Andrea G. (3)	104,000	Golden Eagle (4)	155,100
Austin W. (4)	112,600	Joseph S. Mattos (3)	109,900
Carol-Jack (2)	94,700	Lady of Good Voyage (1)	45,000
Clipper (3)	77,500	Manuel P. Domingos (3)	127,000
Cushman (1)	41,000	Ruth & Helen (1)	12,000
Edith L. Boudreau (2)	71,300	Tina B. (4)	181,100
Evelina M. Goulart (4)	172,900	Two Brothers (1)	21,000

Scallop Landings (Lbs.)

Barbara & Gail (2)	13,000	Enterprise (1)	7,600
Beatrice & Ida (2)	15,200	Muskegon (2)	6,100

STONINGTON (Conn.)

Bette Ann (2)	1,500	Luann (1)	13,500
Carl J. (6)	9,400	Marise (10)	8,600
Carol & Dennis (1)	1,800	New England (1)	3,600
Carolyn & Gary (7)	8,400	Old Mystic (9)	14,500
Connie M. (6)	5,300	Our Gang (2)	5,600
Fairweather (2)	7,000	Theresa (1)	2,800
Irene & Walter (7)	11,400	Weezie May (2)	1,200
Jane Dore (6)	4,000	William B. (5)	12,400
Lt. Thos Minor (8)	11,000		

BOSTON (Mass.)

Agatha & Patricia (3)	97,200	Mary Rose (1)	37,800
Arlington (2)	216,800	M. C. Ballard (2)	81,300
Atlantic (2)	52,700	Michael G. (1)	3,600
Baby Rose (2)	112,800	Michigan (2)	209,800
Bay (2)	128,600	Minnie (2)	183,100
Bonaventure (1)	34,900	Mother Frances (2)	72,800
Bonnie (2)	196,500	Nautilus (1)	52,000
Bonnie Billow (2)	147,300	New Star (2)	133,500
Brighton (2)	142,400	Notre Dame (2)	40,000
Buzz & Billy (1)	19,500	Olympia LaRosa (1)	6,700
Cambridge (3)	238,100	Pam Ann (3)	187,100
Caracara (1)	24,600	Patty Jean (2)	175,400
Carmen & Vince (1)	37,100	Phantom (2)	168,800
Charlotte G. (2)	38,600	Pilgrim (3)	99,900
Charlotte M. (5)	185,100	Plymouth (2)	105,500
Columbia (2)	61,700	Puritan (1)	46,100
Comet (2)	138,000	Racer (2)	177,800
Curlew (2)	6,700	Raymonde (1)	40,500
Dolphin (2)	44,400	Red Jacket (2)	263,700
Doris F. Amero (1)	22,900	Roma (1)	1,400
Eagle (2)	112,500	Rosa B. (2)	150,500
Elizabeth B. (2)	26,600	Rosie (3)	8,700
Emily Brown (2)	129,600	Rush (2)	147,700
Ethelena (2)	51,800	St. Angelo (3)	59,900
Flying Cloud (3)	313,700	St. Antonio II (1)	9,800
Four (3)	191,200	St. Joseph (2)	56,200
Geraldine & Phyllis (3)	118,700	St. Marco (3)	79,300
Hazel B. (5)	173,500	St. Nicholas (1)	33,900
Holy Family (2)	79,300	St. Rosalie (1)	62,300
Ida & Joseph (1)	30,600	Santa Maria (3)	55,900
Jane B. (2)	149,000	Santa Rita (1)	9,500
J. B. Junior (2)	170,800	Sunlight (3)	103,300
J.B.N. (2)	30,600	Swallow (2)	138,800
Jeanne D'Arc (3)	77,300	Terra Nova (3)	207,400
Joseph & Lucia (2)	92,100	Texas (3)	162,400
Josephine P. II (4)	49,800	Thomas Whalen (2)	116,800
Lady of the Rosary (3)	85,400	Villanova (2)	49,400
Manuel F. Roderick (2)	121,400	Vincie N. (1)	10,000
Maria Christina (1)	7,600	Weymouth (2)	159,800
Mary Ann (2)	60,800	Wild Duck (3)	140,900
Mary & Joan (2)	121,800	Wm. J. O'Brien (2)	170,900
		Winchester (3)	299,300
		Wisconsin (3)	292,500

WOODS HOLE (Mass.)

Adele K. (1)	800	Margie (L. (3)	23,200
Arnold (4)	35,300	Metacom (1)	6,200
Bernice (3)	9,400	Papoose (1)	5,400
Carole Ann (3)	12,900	Rita B. (1)	4,900
Famiglia (1)	2,000	Rosann (2)	21,800
Gertrude D. (4)	63,700	R. W. Griffin, Jr. (1)	6,500
Lynn (3)	15,400	Southern Cross (3)	10,900
Madeline (1)	4,000	Three Bells (3)	17,000

Scallop Landings (Lbs.)

Habe Sears (1)	3,400	Stanley M. Fisher (1)	9,300
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"E.S. Ritchie Compasses on practically all the 500 boats"



RITCHIE GLOBE MASTER
 • Special Shock Mounting
 • Internally Gimballed
 • Bellows Type Expansion Chamber
 • Indirect Lighting
 The ideal combination of compass and binnacle.

Mr. C. L. Ringhaver, President of Diesel Engine Sales, Inc., St. Augustine, Florida, knows his compasses as well as he knows his boats. The largest builder of shrimp boats in the country, Mr. Ringhaver says: "We have been using Ritchie Compasses on all the 500 boats we have built for the past two years. It is our plan to use the new Globe Master as well as the other Ritchie Models on many of the new boats coming up."

Fishermen who can sense a top flight compass as soon as they see it, have long been sold on Ritchie Globe Masters. Write for our catalog and see your dealer to get the ideally-suited Ritchie Compass for your boat.

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Pembroke, Mass.

"Guiding Fully-Found Craft Since 1850"

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IMPORTANT ADVANTAGES:

- Knot slippage practically eliminated
- Nets last much longer due to greater abrasive resistance
- Nets stay cleaner, whiter longer
- Nets have much greater resistance to marine organisms



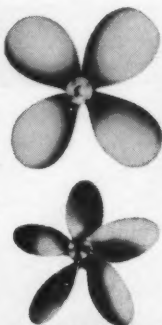
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Columbian propellers give greater power, speed and maneuverability. They get you to your fishing or dragging grounds faster . . . give a head-start back to the market . . . help bring in a catch that is fresher by hours! Other money-saving features: big fuel economies — less layup time for propeller repairs! Columbia offers a complete choice of propeller alloys for every job and water condition, including revolutionary new ELECTRALLOY "N" for the world's toughest, strongest, most corrosion-resistant propellers of UNMATCHED REPAIRABILITY. For new equipment or refitting, it will pay you to ask for propellers and accessories from



COLUMBIAN BRONZE CORP.

Freeport, L. I., New York

GLOUCESTER (Mass.)

Acme (2)	10,000	Lady of the Rosary (2)	9,500
Agatha & Patricia (1)	20,000	Linda B. (4)	6,000
Althea (2)	8,000	Little Flower (4)	17,500
Anna Guarino (1)	1,500	Margaret Marie (2)	5,500
Annie (2)	2,800	Marianna II (3)	46,500
Ave Maria (5)	6,500	Mary (1)	500
Bonaventure (3)	43,000	Mary Ann (4)	33,000
Bonnie Bill (4)	8,900	Morning Star (3)	16,600
Cap Cod (2)	2,400	No More (1)	1,200
Carlansul (8)	10,500	Peggy Belle (3)	2,200
Catherine B. (3)	22,000	Pilgrim (1)	5,000
Cigar Joe (4)	29,000	Pioneer (6)	5,600
Columbia (1)	28,000	Prosperity (5)	9,000
Curlew (1)	135,000	Puritan (1)	5,000
Cushman (2)	420,000	Raymonde (1)	52,000
Dolphin (1)	6,000	Rose & Lucy (2)	15,000
Doris F. Amero (1)	14,000	Rosemarie (4)	22,500
Eagle (2)	75,000	Rosie & Gracie (2)	10,000
Eddie & Lulu M. (6)	8,600	St. Anna Maria (7)	20,800
Estrela (1)	33,000	St. Cabrini (4)	47,000
Eva II (5)	5,900	St. John (1)	1,400
Falcon (8)	28,100	St. Joseph (2)	10,000
Flo (1)	140,000	St. Mary (9)	29,000
Frances R. (3)	25,200	St. Nicholas (1)	100,000
Gaetano S. (3)	77,000	St. Peter (1)	3,000
Gertrude E. (2)	1,000	St. Peter III (7)	48,500
Giacomina (6)	4,700	St. Providence (2)	2,300
Golden Dawn (4)	14,500	St. Rosalie (1)	40,000
Holy Name (4)	56,000	St. Stephen (5)	6,600
Ida & Joseph (6)	73,000	St. Terese (5)	40,500
Immaculate Conception (1)	3,000	St. Victoria (1)	15,000
Irma Virginia (6)	8,800	Salvatore & Grace (1)	5,000
J.B.N. (2)	45,000	Serafina N. (3)	15,000
Josie II (3)	5,400	Serafina II (6)	27,800
Judith Lee Rose (1)	300,000	Theresa M. Boudreau (1)	175,000
Kingfisher (1)	203,000	Tipsy Parson (6)	7,500
Kurta (2)	2,000	Victoria (1)	500
		Villanova (1)	199,000
		Virginia Ann (4)	7,000
		White Owl (5)	4,900

Scallop Landings (Lbs.)

Francis L. MacPherson (1)	11,000	Sylvester F. Whalen (1)	11,000
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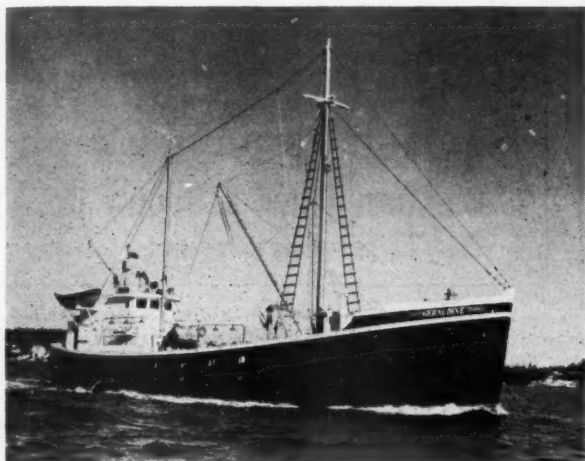
PORTLAND (Me.)

Agnes & Elizabeth (1)	10,000	Medan (1)	250,000
Alice M. Doughty II (5)	48,800	Nancy B. (4)	138,000
Andarte (3)	68,000	Ocean Life (1)	290,000
Araho (3)	51,500	Quincy (1)	183,000
Dorchester (6)	86,000	St. George (1)	155,000
Dorothy & Ethel II (1)	29,000	St. Rosalie (1)	3,400
Elinor & Jean (3)	15,700	Theresa R. (3)	117,000
Gulf Stream (4)	171,000	Vagabond (4)	69,000
John J. Nagle (1)	35,000	Vandal (5)	138,000
Lawrence Scola (2)	9,100	Winthrop (2)	85,000

NEW BEDFORD (Mass.)

Adventurer (4)	48,500	Kelbarsam (4)	38,800
Agdaw (1)	8,000	Lorine III (2)	22,500
Anastasia E. (2)	27,400	Major J. Casey (2)	25,500
Annie M. Jackson (4)	73,000	Malvina B. (2)	21,000
Barbara M. (3)	27,500	Marie & Katherine (1)	20,200
Cap'n Bill II (2)	44,600	Mary E. D'Eon (1)	25,000
Carl Henry (2)	28,800	Mary Tapper (3)	45,000
Carol Ann (1)	9,000	Midway (3)	46,300
Charles E. Beckman (2)	11,200	Miriam A. (2)	29,800
Christina J. (3)	50,500	Molly & Jean (1)	16,000
Christine & Dan (1)	11,500	Nautilus (1)	50,500
Comber (3)	30,500	New England (1)	9,500
Connie F. (2)	47,200	North Sea (4)	67,500
Debbie & Jo-Ann (3)	36,800	Pauline H. (2)	75,300
Eugene & Rose (1)	13,500	Phillip & Grace (1)	18,500
Eugene H. (3)	45,300	Phyllis J. (3)	34,400
Falcon (3)	31,700	Rita B. (1)	8,600
Famiglia (2)	24,800	Roberta Anne (2)	29,400
Friendship (1)	17,500	Rosemarie V. (2)	27,400
Gannet (2)	29,300	Rush (1)	17,500
Growler (2)	23,100	R. W. Griffin, Jr. (2)	44,200
Harmony (2)	19,000	Shannon (2)	30,500
Hope II (3)	31,500	Solveig J. (2)	46,900
Invader (1)	22,500	Stanley B. Butler (2)	62,500
Ivanhoe (3)	45,000	Stella Marie (1)	20,000
Jacintha (2)	62,000	Sunbeam (3)	68,100
Janet & Jean (3)	33,400	Theresa & Jean (2)	67,800
John H. McLoon (1)	20,000	Venture I (2)	52,000
Julia DaCruz (2)	39,800	Victor Johnson (1)	13,000
Katie D. (3)	100,000	Viking (3)	42,800
		Whaler (2)	32,700

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Adele K. (2)	21,500	Laura A. (2)	20,800
Aloha (1)	10,500	Lauren Fay (1)	9,500
Alpar (1)	1,600	Linus S. Eldridge (2)	19,500
Amelia (1)	7,500	Louise (1)	11,000
Babe Sears (1)	9,000	Malene & Marie (1)	9,000
Baltic (2)	21,500	Marjorie M. (1)	3,500
B. Estelle Burke (2)	18,000	Marmax (1)	4,500
Bobby & Harvey (1)	6,500	Mary J. Hayes (2)	22,000
Brant (2)	12,000	Mary J. Landry (2)	6,400
Bright Star (2)	21,000	Moonlight (3)	28,300
Camden (2)	21,000	Nancy Jane (2)	17,000
Carol & Estelle (2)	14,500	New Bedford (2)	22,000
Catherine & Mary (1)	6,000	Newfoundland (2)	12,300
Charles S. Ashley (1)	10,300	Noreen (2)	21,300
Clipper (2)	22,000	Pearl Harbor (1)	11,000
Dartmouth (2)	22,000	Porpoise (1)	6,000
Edgartown (2)	22,000	Rosalie F. (2)	19,000
Eleanor & Elsie (1)	11,000	Ruth Lea (2)	21,600
Empress (2)	12,000	Ruth Moses (1)	6,200
Fairhaven (2)	17,500	Sharon Louise (2)	17,000
Famiglia (1)	10,000	Sippican (2)	22,000
Flamingo (1)	9,000	Smilyn (2)	12,500
Fleetwing (2)	17,500	Snoopy (2)	17,200
Florence B. (1)	8,500	Stanley H. Fisher (1)	10,300
Geraldine (1)	11,000	Stephen R. (2)	17,300
Hilda Garston (1)	9,500	Ursula M. Norton (2)	22,000
Jerry & Jimmy (2)	20,500	Vivian Fay (1)	7,000
John G. Murley (2)	14,500	Wamsutta (1)	4,000
Josephine & Mary (1)	5,500	Whaling City (1)	6,500

ROCKLAND (Me.)

Araho (1)	38,000	Ocean (1)	280,000
Elin B. (2)	9,000	Quincy (1)	32,000
Flo (3)	73,000	Squall (1)	225,000
Helen Mae II (3)	14,200	Storm (1)	300,000
John J. Nagle (2)	80,000	Surf (1)	240,000
Little Growler (1)	8,000	Tide (1)	230,000
Mabel Susan (2)	7,500	Wave (1)	200,000

Scallop Landings (Lbs.)

Rhode Island (1)	8,300
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ILLUSTRATED LITERATURE ON REQUEST.

Texas Shrimp Association

(Continued from page 9)

particularly while trawling. "Sooner or later there's going to be a serious collision. If you're going to use an automatic pilot, keep a man where he can see what's ahead. Sooner or later there'll be trouble if you don't."

He complimented Florida and Texas fishermen on the growing spirit of cooperation for relief and distressed vessels. "We need still more of that," he stated.

Senator W.R. Neblett, Key West, Florida, explained some of the problems confronting the fishing industry as related to the forthcoming Geneva Conference, and explained the vital importance of decisions regarding various marine rights throughout the world which may effect American fishermen. He urged that an observer be sent to the conference to represent the shrimping industry.

Emergency Service Operating Well

Charlie Bevis, executive secretary of the Southeastern Fisheries Association, explained the emergency service set up for boats and crews in distress near Mexican waters. He highly praised the operation of the service, under the direction, in Mexico, of Zygmunt Warren, Mexican shrimp producer, operating through the Shrimp Association of the Americas.

Since the emergency service was set up, 71 shrimp boats have been accommodated in Mexican ports. Of these, 56 were from Florida and 15 from Texas. Under the plan, boats in distress or with sick crewmen, may enter any Mexican port and their needs will be served through the emergency set-up. The distressed boats and crews which have used Mexican ports during this period have spent more than \$15,000 in repairs and medical aid. He too praised the growing cooperation between Texas and Florida and remarked wryly that he saw more Florida boats in Brownsville than he had seen for sometime in Florida.

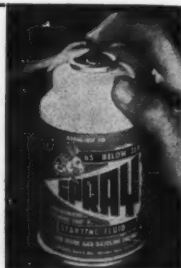
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Norvell Jackson, Rockport, reported that the Association had bought two two-inch pumps and presented them to the Coast Guard for the use in dropping to boats in distress.

Judge Bascom Cox, counsel for the association, explained work done to eliminate the state's claim to double commercial fishing license fees for shrimp boats using double trawls. Some boat owners have been forced to pay the double charge but a ruling from the attorney general's office is to the effect that only the regular license applied, whether the boat dragged a single or double trawl.

Judge Cox also pointed out that there has been no serious trouble with Mexican seizures of American boats in more than a year. He warned owners to demand their crews stay out of Mexican waters. He described a plan by which a weather reporting program may be set up to serve shrimpers in the Gulf, so that trouble spots may be pinpointed and vessel captains warned.

"The usual weather system does not give adequate coverage offshore and it is hoped that we can work out this program so that wherever a local disturbance may occur in the Gulf, fishermen will know about it and can avoid it."

Other speakers included R. E. Whiteleather, George A. Rounsefell and George B. Gross of the U. S. Fish and Wildlife Service; and John Ferguson, president of the Shrimp Association of the Americas and the Southeastern Fisheries Association.

Sam Snodgrass was re-elected treasurer and given the additional assignment of association secretary. Directors elected were: Brownsville-Port Isabel area—John Santos Carinhas, Jr., Adolph Brooks, Ralph White and T. B. Mock; Rockport-Aransas Pass-Corpus Christi—Chick O. Roberts and Fran Lytle; Port Lavaca-Palacios—John Clegg and Ed Dumas; Freeport-Galveston—Wright Gore and John Mehos, both re-elected.

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Pacific "Silent Hour" Cuts Radio Phone Tie-Ups

San Pedro's "silent hour"—a short period during which nobody talks and everybody listens—has been credited by local fishing authorities with breaking one of the most monumental radio transmission "jams" in modern history. The plan was first adopted over a year ago at the urging of local albacore fishermen, who daily relay information to each other along the Pacific coast from Gray's Harbor, Wash., to Baja California, Mexico.

By its use, local and other coast fishing boats are finding they can get their vital messages through, even though there are about 7500 boats along the Pacific coast that use their radios daily. The radio jam was always more or less present along the coast because the thousands of private boats and commercial craft using their radios set up a chatter pattern which prevented any set, no matter how powerful, from penetrating for more than a few miles.

Because of the resulting confusion, relays of information between boats became almost impossible. Emergency calls were often blotted out by more powerful sets nearby or by the volume of numerous small sets operating in



Tony Mihovilovic of San Pedro, skipper of the "Marauder" tunes in on the Silent Hour used by Pacific coast albacore men to speed messages over the airwaves. Equipment on the "Marauder" is an NC-98 National receiver, and a 150 watt Northern transmitter.

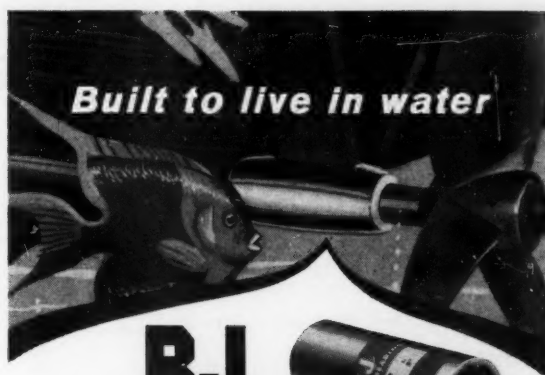
any one area. Finally, the San Pedro albacore fishermen got together and worked out an idea. By setting aside one period a day for their messages, they could be relayed more quickly and the sets could then go off the air, freeing the air lanes of as many as 1500 sets.

The need for urgent action was created by an FCC decision to limit voice conversations of boats to just two channels—2638 and 2738 kilocycles. Then, the boats were more than ever in each others way. Some high frequency bands were left open, but few could afford the extra expensive sets needed for such transmission.

The albacore fishermen, mostly from the California Commercial Fishermen's Association, took their problem to marine radio councils and obtained an agreement from other commercial and private boats giving the fishermen a certain time each day for their broadcasts.

During that period, all other boats go off the air. A chairman selected previously by the albacore boats comes on. He gives his location, fishing conditions, weather report and any other information pertinent to albacore fishing. He then calls other boats situated in predesignated spots and works his way down the coast. Each boat repeats its information quickly and signs off. An occasional question is allowed, but no personal message may be given.

The albacore men, who often range hundreds of miles in a day in search of the fish, now save precious hours, gasoline, and running time because they have accurate information on just where the fishing is good or bad. Radio time is reduced considerably.



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Flexible Steel Lacing Co., 4683 Lexington St., Chicago 44, Ill.

VOLTAGE REGULATORS

Safety Industries, Inc., Box 904, New Haven 4, Conn.

WINCHES

Hancock Marine, 1567 No. Main St., Fall River, Mass.

Hathaway Machinery Co., Inc., New Bedford, Mass.

Stroudsburg Engine Works, 62 North 3rd St., Stroudsburg, Penn.

WIRE ROPE

American Steel & Wire Division, United States Steel, Rockefeller Bldg., 614 Superior Ave., Cleveland 13, Ohio.

John A. Roebling's Sons Co., Trenton 2, N. J.

Wickwire Spencer Steel Division of The Colorado Fuel & Iron Corp., Palmer, Mass.

FOREIGN BAILINGS

THE TWO-TRAWL TECHNIQUE

introduced over a year ago in the Gulf of Mexico by United States fishermen is beginning to be adopted by Mexico's Gulf shrimp boats. The technique consists of the simultaneous towing of two trawls, 40 or 45 feet at the mbuth instead of one 90 or 100 feet.

Each of the trawls has a separate tow cable. With one trawl slightly ahead of the other, they are towed, one from the port and the other from the starboard booms. Some of the boat owners claim that their catch has increased 30 percent.

THE NORWEGIAN WEST COAST

port of Aalesund was teeming with fishermen last month, waiting for the arrival of the winter herring. Altogether there were some 26,000 men manning 2,600 purse seiners and drift netters.

Between Egersund and the southern border of Trondelag province, 51 herring oil reduction plants were ready for day and night operation. They can process 40,000 metric tons a day, and have storage capacity of 75,000 tons. Approximately 80% of the total catch goes to these plants, while the rest is salted, frozen or iced.

A HERRING BEHEADING AND

gutting machine has been the project of a Bergen, Norway manufacturing concern. The machine is of great interest to Norwegian herring fishermen because the herring is salted aboard the vessels.

There are three main parts to the machine, the conveyer belt, the circular knife, and the suction wheel. The herring are placed in pockets on the conveyer and pass by the circular beheading knife. The suction wheel has a hole for each pocket on the belt and each hole is connected to a piston suction device. When the behead herring passes the wheel the device sucks out the entrails.

The machine has capacity of 30 barrels an hour. A watertight 3-hp. engine drives the machine which may be washed while operating.

THE FIRST FREE-PISTON gas

generator turbine trawler *Sagitta* has been launched in Bremerhaven, West Germany. Advantages claimed for the free-piston engines are flexibility, easy maintainance, and simple installation. They weigh less in proportion to their power than regular Diesel engines and occupy less room.

The *Sagitta* measures 130 feet long with a beam of 31 feet and a depth of 23 feet. The fish hold has a 15,000 cubic foot capacity. There are 3,180 cubic feet of refrigerated space forward of the engine room. The free-piston engine delivers 1,800 hp.

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BOAT & GEAR MART

Classified Advertising Rates: \$1.00 per line, \$5.00 minimum charge. Count 9 words to a line. Closing date, 25th. National Fisherman, Goffstown, N. H.

SCALLOP DRAGGER FOR SALE

Built, September 1952, at So. Bristol, Maine. 78' x 18' x 9'8", 4 x 4 double oak frames, oak planking. 280 hp. medium duty Atlas Diesel engine, 750 rpm., pilothouse controls, 2 to 1 reduction gear. 5 kw. tailshaft generator, 115 volt D. C. bank of batteries. Lister auxiliary, 5 kw. generator, air compressor, water pump. 50-watt telephone, 2 Lorans, Bludworth D. F., Hathaway Winch #50, 2 years old. Will ice 80,000 lbs of fish. Boat fishing out of New Bedford at present. Ray Larkey, 12 Greco Terrace, No. Arlington, N. J. Phone Kearny 3-7486.

FOR SALE

Cruisers, draggers, auxiliaries—all types and sizes. If you are in the market for anything in that line, please write us—no inquiry too small to merit attention. KNOX MARINE EXCHANGE, INC., CAMDEN, MAINE.

BOATS FOR SALE

Fishing types, such as purse seiners, draggers, and trollers; commercial types, such as tugs, barges, tankers, freight, passenger and miscellaneous. Donald L. Woodward, Licensed Broker, Box 45-A, Moss Landing, Calif.

SHRIMP TRAWLER FOR SALE

Shrimp trawler *Rise and Shine*. Fully equipped, A-1 condition, 68'. Brine system 20,000 lbs. Telephone, direction finder, recorder, pilot, Stroudsburg, double rig. All rigging and tanks galvanized. Information, Phone 446-M, E. H. Easley, Box 444, Aransas Pass, Texas.

FOR SALE

Oyster dredge boat *Catherine M. Wedmore*, length 56'3" by 18'2", draft 6'. Diesel powered, Hitchcock Hoisters. Boat and machinery in excellent condition. Charles K. Wedmore Sons, 34 South Water St., New Haven 11, Conn.

"GARRY KAY" FOR SALE

Trawler *Garry Kay* for sale, 50' long, 14' beam, 6-71 G. M. Equipped with Bendix depth sounder. This boat is fully equipped and is ready for fishing. For more information write Nels Gregersen, 112 Liberty Ave., Atlantic City, N. J.

TRAWLER "VAN" FOR SALE

Trawler *Van*, 50' long, 14' beam, 6-71 GM. Completely rebuilt, fully equipped with Loran RCA depth recorder, Raytheon Fathometer and RCA telephone. John Schmidt, P. O. Box 728, Mattituck, L. I., N. Y. Mattituck 9-4981.

REBUILT MARINE ENGINES

Rebuilt marine engines with new cylinder blocks: Chris Craft "130" \$675; Chrysler Crown "115" \$650; Royal "8" \$675. 30 kw. Diesel generator set 115 volt D. C. \$600 with heat exchanger. Marine Diesels and parts, starters, generators, pumps. Helwege Marine Engine Co., 741 S. Ocean Ave., Freeport, N. Y.

NEW SURPLUS MARINE EQUIPMENT

PUMPS

MOTOR DRIVEN CENTRIFUGAL PUMPS, 150 GPM, 35' head, 3" suction, 2½" discharge. Motor: 2 HP 8 amp 230 VDC, mfg. by Master Electric Co. \$185.00 ea. FOB

FRESH WATER PUMP for BUDA diesel engine model 1879. \$125.00 ea. FOB

PORTABLE SUBMERSIBLE BILGE PUMPS—115 VDC—140 GPM @ 70' head. 4½ HP motor, with automatic switch, foot valves & waterproof controls, suction strainers, 50' of submersible electric cable. 2½" fire hose threads; all-bronze casing. \$175.00 ea. FOB

BILGE PUMPS—¼ HP—120 VDC—2.4 amps—Ingersoll-Rand type IRVNS¼—13' head @ 35 GPM—1½" inlet—1" outlet—totally enclosed GE motor. Close-coupled motor driven. \$122.75 ea. FOB

DIESEL ENGINES

FAIRBANKS-MORSE 37F10—10 X 12½—6 cyl.—240 HP @ 400 RPM. Built approx. 1945. \$3950. FOB

AIR COMPRESSORS

HIGH PRESSURE DIESEL STARTING AIR COMPRESSORS—mfg. by Worthington—600 lbs. @ 11.4 CFM with 7.5 115 VDC motor, pressure switch, selector switch, spare parts, motor starter. Liquid cooled. \$975.00 ea. FOB

QUINCY MODEL D-320 COMPRESSOR—4 X 2½ X 3—with loadless starting. 2-stage; 15 CFM @ 100 lbs.—3 HP 115 or 230 VDC.

MISCELLANEOUS

AIR TANKS—high pressure diesel starting—600 lbs. \$89.50 ea. FOB

MANIFOLDS—2-valve—4" and 3"—\$37.50 ea. FOB

DUPLEX STRAINERS—oil or water—mfg. by Beth. Steel—\$97.50 ea. FOB

ELECTRIC MOTORS—¼ HP—115 VDC—\$75.00 ea. FOB

INQUIRE FOR HEAT EXCHANGERS, DIESEL GENERATOR SETS, CAPSTANS, WINCHES, WINCH CONTROLS, AXIAL FLOW FANS AND ALL OTHER MARINE SUPPLIES

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313 E. Baltimore St., Baltimore 2, Md.

CUrtis 7-5050

Commission Merchants and Wholesale Dealers in

ALL TYPES OF FROZEN SEAFOOD

WM. M. McCLAIN, INC.

231 S. FRONT ST. PHILADELPHIA, PA. 230 S. WATER ST.

BOATS AND SHIPS FOR SALE AND CHARTER

Purse seiners, draggers, trollers, freezer vessels, tugs, barges, water taxis, cargo ships, tankers, passenger ships, dredges, yachts, surplus type vessels and used marine equipment. World-wide contacts. JERRY'S BOAT SALES, 310 West 7th St., San Pedro, Calif.

WESTERBEKE FISHING GEAR CO., INC.

Grimsby Trawls
Wesco Cod-end Protectors
Wire and Manila ropes

— Distributors —
Boston 10, Mass.
Also store and warehouse Gloucester, Mass.

Marine Hardware
Danforth Anchors
Paints — *Fittings*

ANOTHER MOBIL MARINE CONVENIENCE

Grease Gun Cartridges

One of these two fine greases available in your area



Help Keep Grease Dirt-free!

Refill gun in seconds . . . load without waste or mess! These new grease gun cartridges solve the old problem of time-consuming, messy gun filling. Simply slip one in and begin lubricating. Cartridge holds nearly a pound of top-quality Mobilgrease MP or Mobilux #2 . . . the multi-purpose greases that meet all your machinery grease requirements. Ask your Mobil Marine man about Mobil's latest weapon against corrosion and wear . . . Mobil's grease gun cartridges. Shipped in handy 10-packs, 6 to the carton.

Another reason you're miles ahead with Mobil!



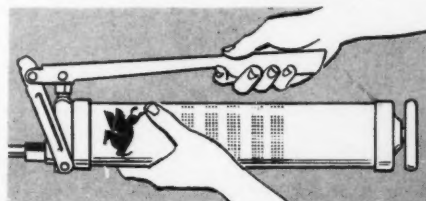
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Tune in "TRACKDOWN" every week, CBS-TV. See local paper for time and station.

SOCONY MOBIL OIL COMPANY, INC., and Affiliates: MAGNOLIA PETROLEUM COMPANY, GENERAL PETROLEUM CORPORATION, MOBIL OVERSEAS OIL COMPANY INC.



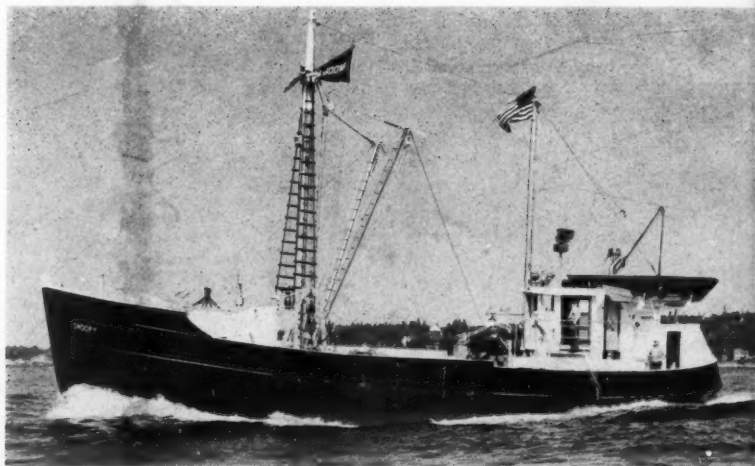
Simply slip Mobil cartridge into gun . . .



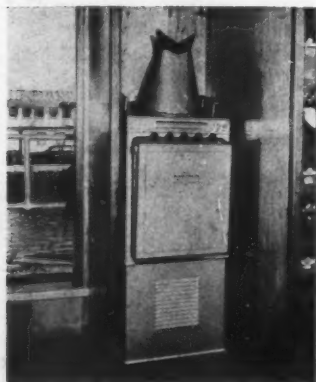
No waste or mess...you're ready to work in seconds!

Safe, Time-Saving Navigation for High-line Scallop-er "Snoopy"

with
Bendix
MARINE
EQUIPMENT



Capt. Andersen checking Bendix Depth Recorder on "Snoopy". Below, the dragger's Bendix Marine Radar.



Bendix Marine Equipment is aboard Capt. A. J. Pedersen's 76-foot scallop dragger "Snoopy"—a consistent highliner in the New Bedford, Mass. fleet since she started her career last year. In seven months of fishing, she made 15 trips to Georges Bank, landing a total catch of 154,000 pounds of scallops. "Snoopy's" skipper, Capt. Martin Andersen, has nothing but praise for his Bendix equipment—Model MR3-B Radar, Model 155 Automatic Pilot, and Model DR-12 Depth Recorder.

Here's what Skipper Andersen says about Bendix:

"It's fine equipment, everything runs good, and I am very well satisfied.

"BENDIX RADAR saves us a lot of time. We use it going in and out of port, for watching other boats on the grounds, and for picking up fishing buoys.

"We find the BENDIX AUTOMATIC PILOT very good—it's a great help and saves one day's time per trip.

"The BENDIX DEPTH RECORDER works beautifully. We use it mainly for navigation. It is also good for holding to the edge of the Bank when fishing."

Capt. Andersen's experience is typical of Bendix users everywhere—in all types of fishing. Ask your dealer or write for complete information on Bendix Marine equipment for your boat.



Bendix makes a full line of Dependable Marine Equipment

DEPTH RECORDERS AND INDICATORS • AUTOMATIC PILOTS • FISH MAGNIFIERS • DIRECTION FINDERS • RADIO TELEPHONES • MARINE RADAR

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